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ABSTRACT

This document reports a needs assessment study designed and conducted to provide South Seattle Community College (SSCC) with information about the present and future educational, occupational training, and cultural needs of the total community served. Results of the survey are divided into chapters covering a specific population of the community which was surveyed. Chapter 2 addresses the survey of business and industry to learn types of technical and semi-professional-level jobs, number of workers in each job classification, perceived supply of available qualified workers, anticipated needs, and upgrading training needed. Chapter 3 reports the survey of the residential community to learn about residents' backgrounds, interests, and needs. Chapter 4 focuses on the survey of SSCC students to learn about backgrounds, considerations in selecting a school, reactions to SSCC programs and services, and future plans. Chapter 5 describes the survey of 1979 high school seniors to learn about backgrounds, interests, and future plans. Chapter 6 discusses the study of 1977 graduates to learn of activities since leaving high school, present activities, future plans, and needs and desires for additional educational-cultural services and activities. Appendixes, amounting to approximately one-half of the report, include the survey instruments and some survey data charts/forms and analyses. (YLB)

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SEATTLE, WASHINGTON 98106

COMMUNITY NEEDS ASSESSMENT

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Community Needs Assessment

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CE027513

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PREFACE

South Seattle Community College, one of three member schools of Washington Community College District VI, was established to serve the educational needs of the residents of the area as well as the training needs of local business and industry. The college has always maintained a close working relationship with the community through the use of occupational advisory committees and by the strong commitment of staff participation with various community groups and agencies. These activities will be continued and, where appropriate, strengthened in the future.

In addition, the college felt that a more systematized and formal approach should be used as a basis for evaluating community needs. A needs assessment study was designed and conducted to provide the college with more information about the community it serves as well as to provide citizens with an opportunity to have a greater voice in what their college should be doing.

The findings of the study are presented in this report. They will provide a guide for program planning, a basis for an evaluation of college programs and services, and a source of direction for more in-depth studies as necessary.

Jerry M. Brockey
President

ACKNOWLEDGMENTS

The community needs assessment study was accomplished through the efforts of more than 200 people, including business and community leaders, community residents, and public and private school administrators, as well as South Seattle Community College administrators, faculty, staff and students.

The study was planned and conducted as a team approach with the content and area coverage reflecting the ideas and suggestions of division and department chairpersons. Special classes were held for student and faculty members and training sessions were conducted for community residents participating in the study.

Dr. Raymond C. Young, Professor of Education, Washington State University, served as consultant and provided resource materials, guidance, and advice.

Dr. H. Carlton Smith, Associate Dean of Instruction, provided invaluable assistance and encouragement, and assumed an active role in the preparation and editing of the final report.

John M. Chrismer, Coordinator
Community Needs Assessment

TABLE OF CONTENTS

Chapter		Page
I.	Introduction	1
II.	Business and Industry	4
III.	Residential Community	34
IV.	South Seattle Community College Students	55
V.	High School Seniors	78
VI.	1977 High School Graduates	97
VII.	Summary and Conclusions	115

APPENDICES

Appendix Number	
A-1	Number of Business-Industry Firms
A-2	Survey Cover Letter
A-3	Business and Industry Information Form
A-4	Survey Follow-up Letter
A-5	Supply and Change Index Worksheet - Business
A-6	Supply and Change Index Worksheet - Industry
A-7	Supply and Change Index Worksheet - Service
A-8	Supply and Change Index Worksheet - Health Care
A-9	Business Workers Demand Indices
A-10	Industrial Workers Demand Indices
A-11	Service Workers Demand Indices
A-12	Health Care Workers Demand Indices
A-13	Vashon Island
A-14	Extended Area Survey, Aviation Maintenance
A-15	Extended Area Survey, Hospitality and Food Sciences
A-16	Extended Area Survey, Horticulture
A-17	Extended Area Survey, Motor Vehicle Maintenance
A-18	Travel Agency Survey
B-1	Residential Community Survey Form
C-1	Student Information Survey Form
C-2	Where Students Attended High School
C-3	Parents Occupations
C-4	Student Information About Services - Aviation
C-5	Student Information About Services - Motor Vehicle
C-6	Student Information About Services - Technical Education
C-7	Student Information About Services - Horticulture
C-8	Student Information About Services - Hospitality
C-9	Student Information About Services - Business and Office
C-10	Student Information About Services - College Transfer
C-11	Student Information About Services - Supervision and Management
D-1	High School Seniors Survey Form
D-2	Field of Interest for Further Study
E-1	High School Graduates Survey Form

LIST OF TABLES

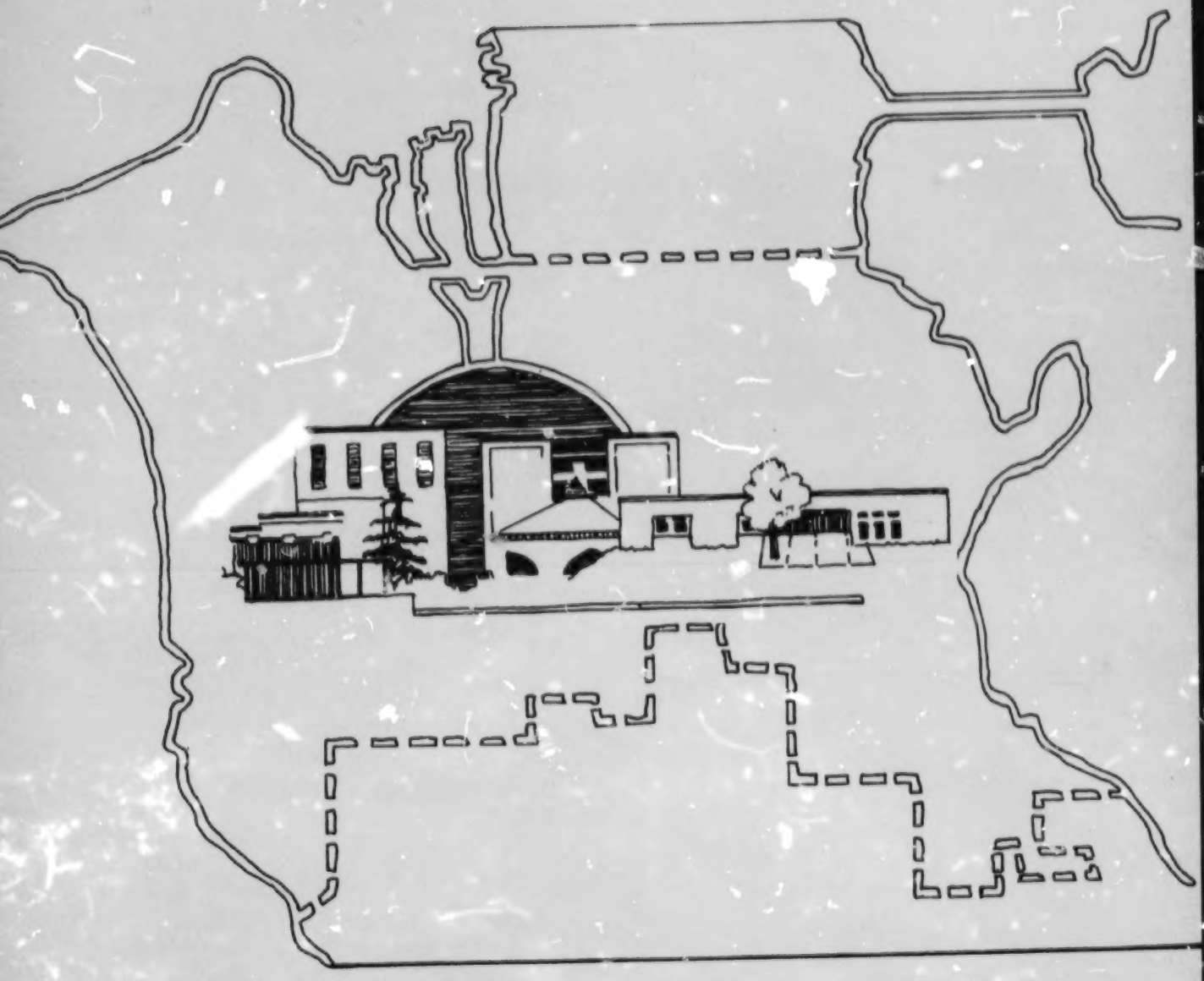
Table Number		Page
2-1	Occupational Classification of Business-Industry Firms	5
2-2	Business-Industry Survey Response Summary	8
2-3	Number of Firms Responding and Their Total Number of Employees	9
2-4	Responses Received With Industry Coverage	10
2-5	Number of Technical and Semi-Professional Workers in Firms Responding	11
2-6	Availability of Qualified Local Employees and Expected Future Change in Demand, Business Workers	13
2-7	Availability of Qualified Local Employees and Expected Future Change in Demand, Industrial Workers	14
2-8	Availability of Qualified Local Employees and Expected Future Change in Demand, Service Workers	16
2-9	Availability of Qualified Local Employees and Expected Future Change in Demand, Health Care Workers	17
2-10	Index of Need for Employee Job Upgrading	23
3-1	Number of Interviews by Sex and Sub-Region	37
3-2	Number of Respondents by Age Group	38
3-3	Last Grade of Formal Schooling Completed	39
3-4	Number of Households With Number of Members in an Educational, Training, or Cultural Program	40
3-5	Community College Campuses Respondents Have Visited	41
3-5(A)	Community College Campuses Visited, by Sub-Regions	41
3-6	Reasons for Not Participating in Educational, Occupational Training, or Cultural Activities	42
3-7	Employment Status by Age Groups	43
3-8	Job Satisfaction of Employees	43
3-9	Support Employers Provide for Education or Training	45
3-10	Purposes for Participating in Educational, Occupational Training, or Cultural Activities	46
3-11	Preferred Location of Classes	46
3-12	Methods of Learning Used and Reactions to Them	47

Table Number		Page
3-13	Like to Participate in Educational, Occupational Training, or Cultural Activities	48
3-14	Types of Refresher Courses Needed	48
3-15	Services That Would Be Of Value	49
3-16	Interest in Occupational Programs	51
3-17	Courses and Activities of Interest	52
4-1	Comparison of Responses Received to Headcount Enrollment	56
4-2	Amount of Work Completed Toward a Certificate or Degree	57
4-3	Basis of Enrollment	58
4-4	Age at Time of Enrollment	59
4-5	High School Curriculum	60
4-6	Rank in High School Graduating Class	61
4-7	Plans to Complete a Program at SSCC	62
4-8	Highest Level of Education or Training Planned	63
4-9	What Students Will Do First Year After Completion at SSCC	64
4-10	Number of Hours Employed Each Week	65
4-11	Source of Information About South Seattle Community College	66
4-12	Most Important Reason for Enrolling at SSCC	67
4-13	Would Students Enroll at SSCC Again	68
4-14	Reasons Why Students Would Not Enroll at SSCC Again	69
4-15	Students' Present Jobs and Career Goals	70
4-16	How Well Students Are Being Prepared	71
4-17	Kinds of Persons Likely to Enroll at SSCC	72
4-18	Why More of Your Friends or High School Classmates Did Not Enroll at SSCC	73
4-19	Student Information About Services at SSCC	74
5-1	Number and Per Cent of Seniors Responding by High School	79
5-2	High School Curriculum	81
5-3	Plans for Continuing Their Education by Reported Class Rank	82
5-4	Plans for First Year After High School	83

Table Number		Page
5-5	Fields of Interest for Further Study	84
5-5(A)	Summary of "Other" Fields of Interest for Further Study After High School	85
5-6	Fields of Interest Ranking	85
5-7	Kinds of Jobs Seniors Would Like to Have Ten Years From Now	87
5-7(A)	Kind of Job Ranked by Sex	88
5-8	Schools They Expect to Enter	89
5-9	Reasons Of Seniors Who Do Not Plan to Continue Their Education	90
5-10	Per Cent of Seniors by Importance of Reasons Why Friends and Classmates Do Not Plan to Enroll at a Community College	91
5-11	How Well is High School Preparing You for What You Want To Do	92
5-12	Amount of Help Received From High School in Choosing an Occupation or in Making Future Educational Plans	93
5-13	Amount of Help Received From High School Services and Facilities	93
5-14	Amount of Help Received From High School Services and Facilities According to the Students' Reported Class Rank	94
6-1	Number and Per Cent of 1977 Graduates Responding	98
6-2	The High School Curriculum of the 1977 Graduates	99
6-3	What the 1977 Graduates Are Doing Now	100
6-4	Training or Education Received Since Graduation	100
6-5	A Comparison of Where the 1979 High School Seniors Planned to Attend School With Where the 1977 Graduates Reported They Did Attend School	102
6-6	A Comparison of Where the 1979 High School Seniors Planned to Attend School With Where the 1977 Graduates Reported They Did Attend by Categories of Schools	103
6-7	The Reasons for Those Not Attending School Now	104
6-8	Type of Education or Training in Which 1977 High School Graduates Expressed Interest	105
6-9	Type of Work You Plan to be Doing Ten Years From Now	106
6-10	Kind of Job 1977 High School Graduates Would Like to Have Ten Years From Now	107
6-11	Types of Assistance That Would Be Of Interest	108

Table Number		Page
6-12	Special Interest Topics Suggested	109
6-13	How Well High School Prepared 1977 Graduates for College	110
6-14	How Well High School Prepared 1977 Graduates for Employment	111
6-15	Perceived Effectiveness of High School Preparation for College or Other Post-High School Work Based Upon The Type of Training Received	112

INTRODUCTION



CHAPTER I: INTRODUCTION

The city of Seattle, a metropolitan community of approximately 500,000 people, is located on Puget Sound between the Olympic Peninsula and the Cascade Mountains. As a result of its location, Seattle has become a major shipping center for water and air transportation serving as a gateway to Alaska and the Orient. Its principal industries include shipbuilding, aerospace, lumber, fishing, and related manufacturing and service industries. The postsecondary educational needs of Seattle are being met by a major state university, five private universities, a multi-campus comprehensive community college, and a number of private schools. The city has excellent medical facilities for research and treatment. Its citizens support an opera company, a major symphony, three legitimate theaters, and four professional athletic teams. Combining these features with its unique and beautiful setting has resulted in Seattle's being ranked as one of the top twelve cities in the country in which to live.

Seattle Community College District

The Seattle Community College District consists of three campuses geographically spaced to serve the north, central, and south parts of the city. During winter quarter, 1980, the Seattle Community College District served 25,971 individuals. North Seattle Community College enrolled 8,021 students, Seattle Central Community College enrolled 9,814 students, and South Seattle Community College served 8,136 students. Full-time student equivalents for the District, North Seattle, Seattle Central, and South Seattle Community Colleges, were 13,622, 4,008, 6,038, and 3,575 FTE respectively.

South Seattle Community

South Seattle Community College is a comprehensive community college designed and operated to serve a wide variety of students with differing educational needs and objectives. It is situated in an area that serves the south, west, southwest, and southeast areas of Seattle. These areas have business and industrial firms ranging from some of the nation's larger industrial manufacturers to small two or three employee product-service plants. The college's service area embraces a wide variety of retail and wholesale firms, numerous professional offices, and a residential population of approximately 126,000. The median family income is about $11,000 and the population is heterogeneous with skill levels ranging from the highly trained professional to the untrained or undertrained. A variety of ethnic backgrounds are represented with many people being new to this country.

South Seattle Community College is organized to offer:

- a program of applied arts and sciences providing vocational-technical education, including preparatory, occupational extension and apprentice related programs.

-a program of liberal studies providing up to two years of collegiate education transferable to a four-year college or university.

-a program of general education providing courses and programs to serve a person's education and academic interests and needs.

-a program of community services providing for the cultural and the leisure time needs and interests of the public.

South Seattle Community College has instructional programs in aviation maintenance, basic and developmental education for the undereducated adult, business and office occupations, college transfer, engineering technology, English as a second language, high school completion, home and family life education, hospitality and food sciences, landscape and environmental horticulture, motor vehicle maintenance, and supervision and management development. Each of these major divisional units provides a wide variety of preparatory and supplemental training programs for numerous occupations.

The Community Needs Assessment Survey

South Seattle Community College is based upon a strong belief that a community and its community college should have a close working relationship. In order to gain information about the community and to provide that community an opportunity to have a voice in planning educational services, a community needs assessment survey was conducted during the 1978-79 and 1979-80 academic years.

The purpose of the community needs assessment survey was to determine the present and future educational, occupational training, and cultural needs of the total community served. The results of the survey would provide (1) a guideline for program planning, (2) a basis for more in-depth studies, and (3) a basis for evaluation of the college programs and services. Conducting the survey was in accordance with the provisions of South Seattle Community College's six-year plan and the recommendations of the Northwest Association of Schools and Colleges Commission on Colleges Evaluation Committee.

The Community Served

An analysis of the composition of the community was made to determine logical groupings for the needs assessment survey. As a result, the study was divided into five major parts: (1) business and industry, (2) general residential population, (3) high school seniors, (4) recent high school graduates, and (5) current South Seattle Community College students.

Commonly used geographic lines for the community served cover the area from Spokane Street south to the city limits and from Lake Washington to Puget Sound, including Harbor Island, West Seattle, and Vashon Island. Since any one of the three colleges in the Seattle Community College District may offer specialized programs covering the entire district, some South Seattle

Community College programs extend district-wide. Furthermore, some of the occupational programs offered by South Seattle Community College serve a community that covers the common geographic and district boundaries and extends to all of King County and beyond. As an example, the aviation maintenance program serves aviation firms over the entire United States. Because the geographic area served varies with the occupational programs, the business and industry survey covered a different and generally more inclusive area than the other four surveys used in the needs assessment. The specific area and populations covered for each of the five parts of the needs assessment are presented in subsequent chapters.

Organization for the Survey

The community needs assessment survey was directed by a coordinator working within the Continuing Education Division. Consultant services throughout the survey were provided by Washington State University and numerous business and community leaders assisted in the planning and development of the survey. Specialized consultant services in statistics and interviewing were provided by the University of Washington and GMA Research Corporation. South Seattle Community College faculty and students participated through special classes established for that purpose. An occupational teacher education class was designed for the faculty members and a social studies practicum for the students. Community residents were given specialized training in interviewing techniques and assisted in conducting the household interviews. More than 200 persons participated in some phase of planning and conducting the survey.

CHAPTER II: BUSINESS AND INDUSTRY

The purpose of the business-industry survey was (1) to learn what technical and semi-professional level jobs there were in the area served by South Seattle Community College, (2) the number of workers in each job classification, (3) the perceived supply of qualified workers available, (4) the anticipated future needs for qualified workers, and (5) the training needed to upgrade current employees.

Geographic Boundaries and Source of Data

The geographic area served by different instructional programs varied. Since business and office occupations and college transfer programs are offered by each community college in the district, the major area of coverage for these programs offered by South Seattle Community College is within the geographic boundaries of the college. Motor vehicle maintenance, engineering technology, and horticulture are unique to South Seattle Community College and serve students throughout the district. Aviation maintenance and dispensing equipment maintenance serve an extended and even nationwide area. Each of the programs, however, has students participating from throughout the area, in fact, from throughout the state, nation, and foreign countries.

The geographic coverage established for the general business-industry survey included (1) the area bordered by Puget Sound, South 128th Street, Lake Washington, and South Spokane Street, but including Harbor Island and all of West Seattle, (2) the major downtown Seattle business-industrial area, and (3) Vashon Island. The major downtown Seattle area was included since South Seattle Community College has an extensive supervision and management program there. Page 6 has a map showing the geographic coverage.

A business-industry listing was purchased from Contacts Influential that covered the geographic area included in the study. It listed the businesses by location, occupational classification, and number of employees. Table 2-1 shows the occupational areas covered and the number of businesses listed in each zip code area is contained in Appendix A-1.

The Survey Instrument

The survey instrument contained three parts. Part one was concerned with general information such as the company name, address, and number of employees. Part two contained a listing of the jobs commonly found at the technical and semi-professional level and was divided into the areas of business, industrial, service, and health care workers. The employers were asked how many employees they had for each job, how adequate the supply of qualified employees was, and any changes in number of employees they anticipated in the future. Part three was concerned with the training needs of the firms for their present employees.

Technical and semi-professional employees were defined as categories of

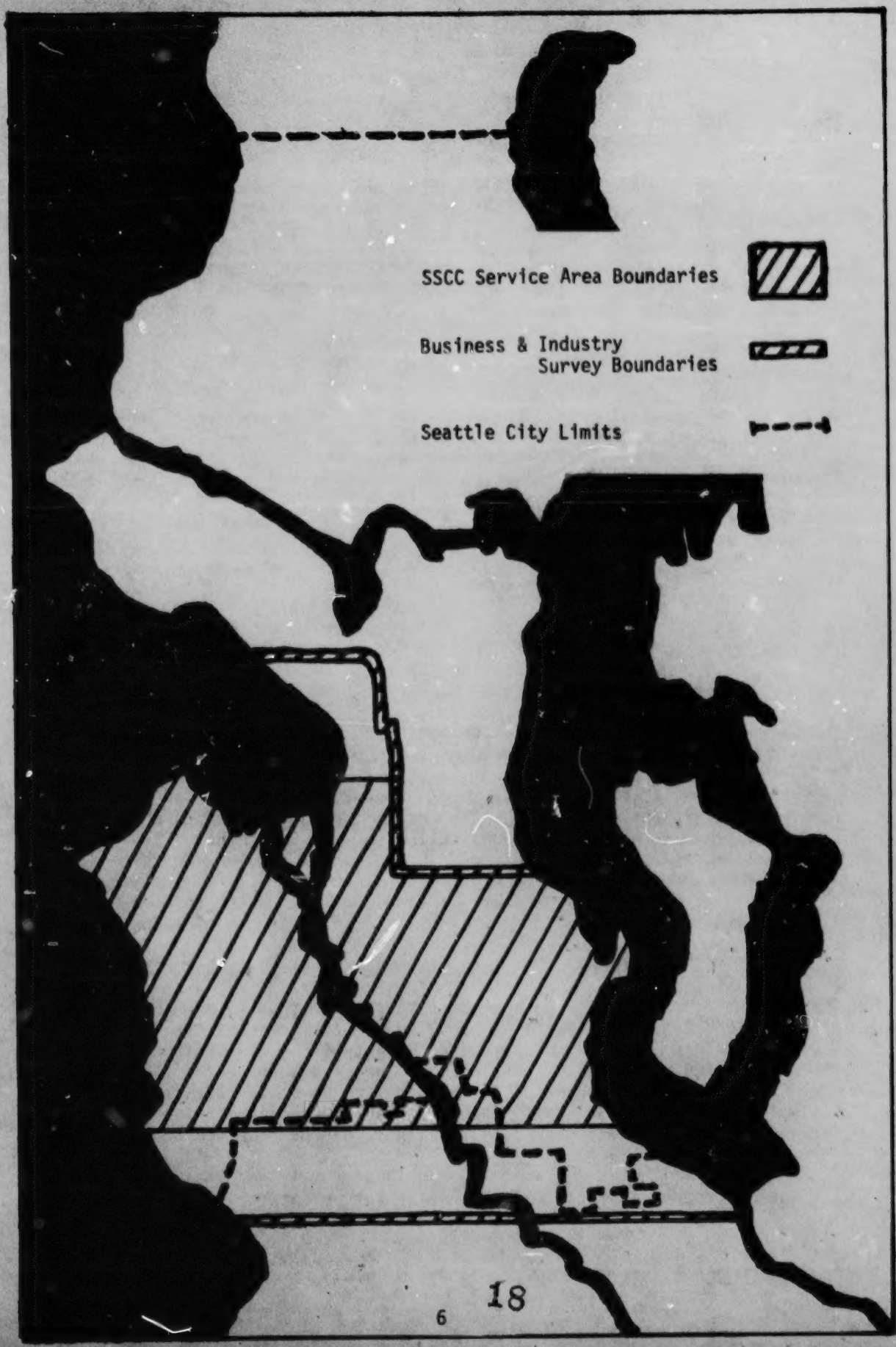
employees requiring preparation beyond the high school level but less than the four-year college degree. It is the area most commonly served by community colleges.

A basic listing of jobs was developed from a review of the Dictionary of Occupational Titles and from previous similar surveys. This was reviewed by each of the instructional division chairpersons and coordinators. The listing of jobs in the survey instrument reflects their analysis.

TABLE 2-1

Occupational Classification of Business-Industry Firms
(By number and size)

	Number of Employees				
Business/Industry Classification	1-5	6-25	26-99	100 and over	Total
Agriculture, Forestry Fishing	39	10	1	0	50
Mining	3	2	0	0	5
Construction	172	74	20	6	272
Manufacturing	249	219	116	51	635
Transportation, Communications, Utilities	185	152	67	20	424
Wholesale Trade	624	391	112	20	1,147
Retail Trade	1,030	419	98	21	1,568
Finance, Insurance, Real Estate	546	281	82	37	946
Services	2,471	575	121	27	3,194
Public Administration	0	0	0	2	2
Totals	5,319	2,123	617	184	8,243


SSCC Service Area Boundaries
Business & Industry
Survey Boundaries
Seattle City Limits

Field Test

Thirteen firms, representing different kinds and sizes of businesses, were selected for a field test of the proposed instrument. Each was sent the instrument, with a cover letter and an evaluation sheet. This was followed with a telephone call to answer any questions, and to explain the purposes of the field test and the subsequent business and industry survey. Ten of the firms responded. As a result of the field test, minor changes were made in the format of the survey form. There were no changes in the content coverage. A copy of the cover letter is in Appendix A-2 and the revised survey form is in Appendix A-3.

The Sample

It was determined that reliable results would be obtained by including all firms that had 26 or more employees and taking a random sample of those with 25 or fewer employees. The random sample was one out of every five firms in South Seattle and one out of every ten in the downtown Seattle area. The latter was due to the exceptionally large number of professional offices, such as doctors, dentists, and lawyers having a small number of employees.

The Procedures Used

All business firms with 100 or more employees were surveyed by personal contact. A South Seattle Community College representative would make an appointment, call on the firm to explain the study and leave the survey form, and return at an appointed time to pick up the completed survey.

GMA Research Corporation provided three hours of training in interviewing techniques for ten interviewers who made the personal contacts.

All of the firms having from 26 through 99 employees were mailed the survey form with an explanatory letter and a franked, return addressed envelope. A followup mailing and then a phone call were made as needed. The firms having 25 or fewer employees selected in the random sample were covered in the same manner. They were selected by taking every fifth (or tenth) firm shown in the business-industry listing. A copy of the followup letter is in Appendix A-4.

The Responses Received

The number of firms contacted and the percent of return is shown in Table 2-2. It is divided into sections to show the coverage by size of the firms for the South Seattle and downtown Seattle areas. Out of the 1,868 firms covered in the survey, 204 could not be contacted as they had moved out of the geographic area or had gone out of business. They have been deleted to leave a sample total of 1,663 firms. The much higher percent of return from the firms with over 100 employees is due to their having received the survey through personal contact.

The Boeing Company was not included in the survey due to its extremely

large size and the frequently changing nature of its needs. The company has been informed about the survey, and the Technical Education Division, South Seattle Community College, maintains close contact with the Boeing Company to provide special training programs as needed.

The initial mailing in the South Seattle area included businesses with five or less employees. However, many were returned as nondeliverable and the number of responses received, 30 out of 403 delivered, was small. A followup mailing was not made to this group. Since the responses received were similar to those of the firms having 6 to 25 employees, it is combined with them in the subsequent tables that analyze the responses. All of these tables combine the responses for the South Seattle and downtown areas unless it is specified to the contrary. The number of firms responding by size, and the total number of employees they reported as having are shown in Table 2-3.

TABLE 2-2

Business-Industry Survey Response Summary

South Seattle	Sample	Return	Percent
1-5 employees	403	30	7.4
6-25 employees	322	93	28.9
26-99 employees	305	106	34.8
Over 100 employees	97	76	78.4
Subtotal	1,127	305	27.1
Downtown Seattle			
6-25 employees	191	22	11.5
26-99 employees	239	88	36.8
Over 100 employees	106	75	70.8
Subtotal	536	185	34.5
Totals for Basic Survey	1,663	490	29.5

TABLE 2-3

Number of Firms Responding and Their Total Number of Employees
(Shown by size of firm)

Size	Number of Firms Responding	Total Number of Employees
Over 100	151	72,533
26-99	194	10,322
6-25	115	1,805
5 or Less	30	99
Totals	490	84,759

Table 2-4 shows the responses classified by industrial category and by size of the firms responding. Each box contains two numbers, the smaller is the number of firms responding and the larger is the number of employees in those firms. In construction, for example, there were responses from six firms having from 6 to 25 employees and representing a total of 98 employees. There was a total of 19 firms with 4,645 employees responding for the construction industry. No responses were received from the agriculture, forestry and fishing, or the mining industrial categories. Table 2-4 shows that a total of 490 firms with 84,759 employees responded for all of the industrial categories.

The number of workers considered as technical and semi-professional by the firms responding is shown in Table 2-5. They are grouped into the major occupational areas of business, industrial, service, and health care workers. Again referring to construction, there were 549 business workers, 1,103 industrial workers, and 39 service workers for a total of 1,691 technical and semi-professional workers. For all of the industries, Table 2-5 shows a total of 43,660 workers.

A comparison of the total number of employees identified as technical and semi-professional in Table 2-5 with the total number of employees reported in Table 2-4 indicates that 51.5 per cent of the employees are in the level of jobs for which training is provided by community colleges. As a specific example, in the construction industry, 1,691 (36.4 per cent) of the 4,645 employees are considered as technical and semi-professional.

TABLE 2-4

Responses Received With Industry Coverage
(By size of firm and number of employees)

	-Size of firms -Total number of employees				
Industrial Category	1-5	6-25	26-100	over 100	Total
Agriculture, Forestry, Fishing	0 0	0 0	0 0	0 0	0 0
Mining	0 0	0 0	0 0	0 0	0 0
Construction	0 0	6 98	6 217	7 4,330	19 4,645
Manufacturing	2 10	21 374	43 2,376	32 9,438	98 12,198
Transportation, Communications, Utilities	3 5	7 121	20 1,144	16 9,735	44 11,005
Wholesale Trade	3 10	27 419	39 1,819	15 4,483	84 6,731
Retail Trade	4 14	28 401	32 1,807	23 12,108	87 14,330
Finance, Insurance, Real Estate	5 18	6 115	19 993	35 14,851	65 15,979
Services	15 42	20 277	35 1,964	21 6,788	91 9,071
Public Administration	0 0	0 0	0 0	2 10,800	2 10,800
Totals	30 99	115 1,805	194 10,322	151 72,533	490 84,759

TABLE 2-5

Number of Technical and Semi-Professional Workers in Firms Responding
(By industrial category and major occupational areas)

	Occupational Area				
Industrial Category	Business Workers	Industrial Workers	Service Workers	Health Care Workers	Total Workers
Agriculture, Forestry, Fishing	0	0	0	0	0
Mining	0	0	0	0	0
Construction	549	1,103	39	0	1,691
Manufacturing	2,410	2,455	129	2	4,996
Transportation, Communications, Utilities	2,152	1,272	1,812	1	5,237
Wholesale Trade	2,319	684	105	1	3,109
Retail Trade	9,022	395	1,725	11	11,153
Finance, Insurance, Real Estate	5,955	154	910	1,258	8,277
Services	2,393	322	1,023	826	4,564
Public Administration	1,869	675	1,997	92	4,633
Totals	26,669	7,060	7,740	2,191	43,660

Supply of Qualified Persons and Anticipated Future Changes in Demand

The employers were asked to tell how many employees they had for each of the jobs listed in the survey form and to add any additional jobs not listed. They were asked their opinion about the supply of qualified persons for each of the jobs in which they had employees and about any expected changes they might have in the number of employees for each of the jobs in the foreseeable future.

The responses for the jobs in the business workers classification are shown in Table 2-6. Column I has a listing of the jobs, including those added by the employers. Column II shows the number of employees for each job. Column III has the number of employers that perceive the supply of qualified workers as surplus, adequate or scarce. The information is presented according to the size of the firms responding. Subcolumn A includes firms with 100

or more employees; B, 26-99 employees; and C, 25 or less employees.

The employers' expected changes in their number of employees is shown in Column IV. Subcolumns again are provided to show the number of firms, by size, that anticipate an increase, a decrease, or no change.

Tables 2-7, 2-8, and 2-9 contain the responses for the industry, service, and health care workers. (For ease of reading, the usual order for industrial and service workers has been reversed for Tables 2-7 and 2-8.)

Table 2-6

AVAILABILITY OF QUALIFIED LOCAL EMPLOYEES AND EXPECTED FUTURE CHANGE IN DEMAND

(I)	(II)	(III)			(IV)		
Type of Job		Availability			Change in Demand		
		Surplus	Adequate	Scarce	Increase	Decrease	Remain Same
		*A B C	A B C	A B C	*A B C	A B C	A B C
A. BUSINESS WORKERS							
1. Auditors & Accountants	821	9-1-3	76- 70-26	9- 8- 4	16-10- 1	2-1-1	75- 60-30
2. Bookkeepers	957	3-0-2	86-108-70	11-27- 9	16-17- 8	2-5-1	81-102-69
3. Credit Persons	840	0-0-2	40- 42-17	11-13- 4	6- 3- 2	1-1-0	45- 45-24
4. Purchasing Agents	568	4-0-2	76- 48-30	7-18- 7	6- 9- 3	2-4-0	79- 49-32
5. Secretaries	1,908	3-2-3	72- 35-55	43-44-10	25-26-12	3-3-0	89- 91-54
6. Stenographers	203	1-0-1	14- 16- 9	6- 6- 4	5- 2- 3	2-1-1	17- 15-12
7. Machine Transcribers	145	1-0-1	12- 9- 4	13- 7- 3	3- 2- 1	2-0-1	22- 12- 9
8. Typists	1,285	5-2-2	41- 31-17	24-12- 7	13-15- 7	2-1-1	47- 36-16
9. File Clerks	721	10-5-2	57- 32-18	2- 9- 3	7- 3- 2	2-1-1	57- 48-19
10. Receptionists, Host Persons	529	11-2-2	64- 54-19	12-10- 3	6- 1- 1	4-1-1	73- 70-20
11. Word Processors	142	0-0-1	9- 7- 5	18-10- 4	14- 6- 3	0-1-0	11- 13- 4
12. Computer Programmers	265	0-0-0	24- 5- 3	21- 5- 1	9- 2- 1	1-1-0	34- 9- 2
13. Computer Operators	270	0-0-0	34- 18- 7	21- 9- 2	10- 3- 2	0-2-1	40- 29- 7
14. Data Entry Operators	446	4-1-0	37- 11- 5	23-10- 1	13- 7- 1	2-0-1	46- 25- 3
15. Office Machine Operators	373	1-1-1	25- 16-17	3- 6- 0	2- 3- 0	0-1-1	24- 23-12
16. Sales Representatives	1,623	4-1-4	44- 36-21	13-25-12	13-23-11	1-1-1	43- 53-31
17. Sales or Order Clerks	5,498	2-0-2	33- 30-24	9-10-10	9-13- 2	2-0-0	31- 37-28
18. Receiving/Warehouse Clerks	1,136	12-1-4	53- 37-24	5- 4- 4	5- 7- 3	4-1-1	57- 47-27
19. Advertising or Display Persons	253	2-0-1	19- 4- 5	3- 2- 1	5- 0- 1	0-0-1	16- 8- 5
20. Supervisors	3,247	1-1-2	76- 37-25	17-16-10	19-12- 4	4-0-3	69- 59-31
21. Managers or Dept. Heads	2,901	0-1-2	84- 52-44	16-26-14	15-16- 3	1-4-1	83- 82-57
Other Business Workers							
22. General Office	1,501	2-1-0	18- 14- 1	2- 5- 3	3- 1- 2	1-0-0	22- 3-10
23. Accounting Clerk	60	0-0-0	5- 4- 1	2- 1- 0	2- 1- 0	0-1-0	5- 4- 0
24. Loan Processors	245	0-0-0	1- 2- 0	5- 5- 3	3- 4- 2	0-0-0	1- 1- 0
25. Claims Technicians	41	0-0-0	3- 3- 1	1- 1- 1	2- 2- 1	0-0-0	2- 2- 0
26. Tellers	657	0-0-0	1- 1- 0	4- 2- 1	3- 0- 1	0-0-0	1- 2- 1
27. Grocery Checkers	34	0-0-0	2- 0- 0	0- 1- 0	0- 0- 0	0-0-0	0- 3- 0

*A - Number of firms having 100 or more employees.
B - Number of firms having from 26-99 employees.
C - Number of firms having 25 or less employees.

Table 2-7

AVAILABILITY OF QUALIFIED LOCAL EMPLOYEES AND EXPECTED FUTURE CHANGE IN DEMAND

(I) Type of Job	(II)	(III) Availability			(IV) Change in Demand		
		Surplus	Adequate	Scarce	Increase	Decrease	Remain Same
		A B C	A B C	A B C	A B C	A B C	A B C
C. SERVICE WORKERS							
1. *Barbers & Beauty Operators*	77	2-0-0	3- 2-0	0- 1-0	1-0-0	0-0-0	5- 2- 0
2. *Entertainers*	73	0-1-0	4- 3-0	0- 0-0	0-0-0	1-0-0	3- 4- 0
3. *Social Service Workers*	145	4-1-0	6- 3-0	0- 0-0	1-0-0	0-0-0	7- 3- 0
4. *Firemen & Firewomen*	640	1-0-0	0- 0-0	0- 0-0	0-0-0	0-0-0	1- 0- 0
5. *Police Officers*	1120	1-0-0	7- 0-0	0- 0-0	3-0-0	2-0-0	3- 0- 0
6. *Legal Technicians*	35	1-1-0	0- 0-3	1- 0-0	0-0-1	0-0-0	2- 0- 2
7. *Automotive Repair*	74	0-0-0	1- 1-3	1- 2-2	0-2-1	0-0-1	3- 1- 4
8. *Diesel & Heavy Equipment Repair*	163	0-0-0	1- 2-0	5- 2-3	0-2-3	0-0-0	4- 2- 0
9. *Aircraft Repair, A&P*	114	0-0-0	1- 0-0	1- 0-1	1-0-1	0-0-0	1- 0- 0
10. *Aircraft Repair, Production*	-	0-0-0	0- 0-0	0- 0-0	0-0-0	0-0-0	0- 0- 0
11. *Aircraft Repair, Unlicensed*	-	0-0-0	0- 0-0	0- 0-0	0-0-0	0-0-0	0- 0- 0
12. *Avionic Repair*	-	0-0-0	0- 0-0	1- 0-0	1-0-0	0-0-0	0- 0- 0
13. *Cooks*	565	1-0-0	17-10-1	12-10-0	6-5-0	1-1-0	19-13- 1
14. *Bakers*	134	0-0-0	6- 0-0	7- 2-0	3-1-0	1-0-0	8- 0- 0
15. *Waiters/Waitresses*	1214	5-2-0	8- 9-0	4- 4-0	2-4-0	3-1-0	12- 9- 0
16. *Host/Hostess*	742	2-0-0	10-10-1	2- 3-0	1-3-0	4-1-0	9- 8- 1
17. *Beverage Personnel*	318	1-1-0	8- 7-0	4- 4-0	3-3-0	2-0-0	8- 9- 0
18. *Food Service Management*	224	0-0-0	17- 5-0	7- 7-0	6-2-0	2-1-0	16- 8- 0
19. *Food Dispensing Equipment Technician*	28	0-0-0	1- 0-1	2- 0-0	0-0-0	0-0-0	3- 0- 1
20. *Landscape Maintenance*	55	1-0-0	5- 0-0	0- 0-1	1-0-1	0-0-0	5- 0- 0
21. *Landscape Design*	4	0-0-0	3- 0-0	0- 0-0	0-0-0	0-0-0	3- 0- 0
22. *Floristry*	4	0-0-0	2- 0-0	0- 0-0	0-0-0	1-0-0	1- 0- 0
23. Custodians	328	0-2-0	10-16-6	2- 2-2	2-1-3	0-0-0	5-16-11
24. Maintenance Persons	248	1-0-0	4- 5-1	3- 2-3	3-2-3	0-1-0	5- 7- 4
25. Truck/Bus Drivers	1366	2-0-0	4- 2-5	1- 1-1	1-1-1	0-0-0	2- 1- 9
26. Auto Parts Persons	19	0-0-0	1- 1-1	0- 1-0	0-0-0	0-1-0	0- 3- 0

Table 2-8 AVAILABILITY OF QUALIFIED LOCAL EMPLOYEES AND EXPECTED FUTURE CHANGE IN DEMAND

(I) Type of Job	(II)	(III) Availability									(IV) Change in Demand								
		Surplus			Adequate			Scarce			Increase			Decrease			Remain Same		
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
B. INDUSTRIAL WORKERS																			
1. *Draftspersons*	284	2	0	0	16	8	2	12	6	5	9	9	4	2	0	1	17	10	2
2. *Machinists*	1086	1	0	0	9	5	4	17	6	6	10	11	5	2	0	1	15	7	4
3. *Power Station Operators*	155	0	0	0	3	0	1	1	0	1	1	1	0	0	0	1	3	0	1
4. *Welders & Flame Cutters*	778	1	0	0	13	6	3	5	6	3	6	9	2	1	0	1	12	8	4
5. *Foreman, Shop*	375	0	0	0	25	14	7	10	11	9	6	6	1	1	1	1	27	21	13
6. *Inspectors, Shop*	176	0	0	0	10	3	2	8	4	1	8	5	1	1	0	1	8	5	1
7. *Sheet Metal Workers*	632	0	0	0	5	2	3	4	3	3	3	6	3	1	0	1	5	3	2
8. *Mill Wrights*	115	0	0	0	1	1	1	6	0	0	2	2	0	0	0	1	5	2	0
9. *Electrotypers & Stereotypers*	4	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	1	0
10. *Die Setters*	11	0	0	0	1	1	1	1	0	0	1	1	0	0	0	1	2	1	0
11. *Die Makers*	29	0	0	0	2	2	0	3	1	0	1	0	0	0	0	0	6	2	0
12. *Die Designers*	5	0	0	0	1	1	0	1	0	0	1	0	0	0	0	0	3	0	0
13. *Lay-out Persons*	31	0	0	0	4	0	1	5	4	1	2	2	1	0	0	0	5	2	1
14. *Structural Steel Fabricators*	412	0	0	0	2	1	0	5	2	0	2	1	0	1	0	0	3	2	0
15. *Technicians, Electronic*	389	2	0	0	8	3	0	6	5	2	5	3	1	1	0	0	10	5	1
16. *Technicians, Electro-Mechanical*	102	1	0	0	3	2	1	3	4	1	2	3	1	0	0	0	4	2	2
17. *Technicians, Chemical Engineering*	32	1	0	0	1	0	0	0	2	0	0	1	0	0	0	0	2	1	0
18. *Technicians, Laboratory*	244	3	0	0	8	1	0	3	0	0	5	0	0	0	0	0	10	1	0
19. *Technicians, Civil Engineering*	122	1	0	0	3	0	0	0	1	1	0	1	1	0	0	0	5	0	0
20. *Technicians, Mechanical Engineering*	61	1	0	0	6	1	0	4	0	2	2	0	1	1	0	0	8	1	0
21. *Technicians, Mechanical Systems Design*	2	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	1	0	0
22. *Technicians, Metallurgical*	11	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0	1
23. *Technicians, Quality Control*	85	0	0	0	10	2	0	3	3	0	1	2	0	1	0	0	12	3	0

(continued)

Table 2-8 (cont'd) AVAILABILITY OF QUALIFIED LOCAL EMPLOYEES AND EXPECTED FUTURE CHANGE IN DEMAND

(I) Type of Job	(II)	(III) Availability			(IV) Change in Demand		
		Surplus	Adequate	Scarce	Increase	Decrease	Remain Same
		A B C	A B C	A B C	A B C	A B C	A B C
B. INDUSTRIAL WORKERS, (cont.)							
24. *Technicians, Surveying*	41	1-0-0	3-0-0	0-0-0	0-0-0	0-0-0	4-0-0
25. *Technicians, Instrumentation*	29	1-0-0	3-0-0	1-2-0	1-1-0	0-0-0	4-1-0
26. *Mechanics, Motor Vehicle*	249	1-0-0	8-3-4	7-2-4	5-3-1	0-0-0	11-2-7
27. *Mechanics, Heavy Equip. & Diesel*	335	1-0-0	9-2-0	9-6-3	4-4-3	0-1-0	14-3-1
28. *Mechanics, Aircraft, A&P*	117	0-0-0	1-0-0	1-1-0	1-1-0	0-0-0	2-0-0
29. *Mechanics, Aircraft Production*	1	0-0-0	0-0-0	1-0-0	0-0-0	0-0-0	1-0-0
30. *Mechanics, Aircraft Unlicensed*	1	0-0-0	0-0-1	0-0-0	0-0-0	0-0-0	0-0-1
31. *Mechanics, Avionic Production*	-	0-0-0	0-0-0	1-0-0	1-0-0	0-0-0	0-0-0
32. *Mechanics, Refrig/Air Conditioning*	180	3-0-0	1-2-0	5-6-0	4-4-0	0-0-0	4-4-0
33. *Mechanics, Radio & T.V.*	2	1-0-0	0-0-0	1-0-0	0-0-0	0-0-0	2-0-0
34. *Mechanics, Office Machine*	1	1-0-0	0-0-0	0-0-0	0-0-0	0-0-0	0-0-0
35. *Photoengravers & Lithographers*	6	0-0-0	1-2-0	0-0-0	0-1-0	0-0-0	1-0-0
36. *Engravers, Except Photo-engravers*	2	0-0-0	1-0-0	0-0-0	0-0-0	1-0-0	0-0-0
37. *Compositors & Typesetters*	35	2-0-0	0-2-0	0-1-1	2-1-1	0-2-0	0-0-0
38. *Foundry Practices*	136	0-0-0	1-0-0	0-1-1	0-1-0	0-0-0	1-0-1
39. *Tool Makers*	62	0-0-0	1-1-0	5-2-0	4-2-0	2-0-0	1-0-0
40. Auto Painters	20	0-0-0	0-0-0	1-1-0	1-0-0	0-0-0	1-0-0
41. Jewelry,Design&Setting	21	0-0-0	0-2-0	0-2-0	0-0-0	0-0-0	0-2-0
42. Truck, Body Production&Repair	19	0-0-0	0-1-0	0-3-0	0-2-0	0-0-0	0-2-0

Table 2-9

AVAILABILITY OF QUALIFIED LOCAL EMPLOYEES AND EXPECTED FUTURE CHANGE IN DEMAND

(I) Type of Job	(II)	(III) Availability									(IV) Change in Demand								
		Surplus			Adequate			Scarce			Increase			Decrease			Remain Same		
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
D. HEALTH CARE WORKERS																			
1. Dental Hygienists	15	0	0	0	3	0	2	0	0	2	2	0	3	0	0	0	1	0	0
2. Dental Assistants	31	0	0	0	3	0	3	0	0	1	1	0	1	0	0	0	2	0	2
3. Nursing (Practical)	264	0	0	0	5	0	1	7	2	0	4	1	0	1	0	0	6	1	2
4. Nursing (Registered)	983	3	0	0	11	0	0	3	3	0	5	0	0	1	0	0	12	1	0
5. Medical Records Librarian	122	0	0	0	6	0	0	2	2	0	2	0	0	0	0	0	5	1	0
6. Medical Office Assistant	129	1	0	0	1	0	2	1	0	0	2	0	0	0	0	0	1	0	2
7. Ward Clerk	102	0	0	0	3	0	0	5	1	0	2	0	0	1	0	0	5	0	0
8. Respiratory Therapist	56	0	0	0	4	0	0	3	0	0	1	0	0	0	0	0	5	0	0
9. Dental Laboratory Technician	17	0	0	0	2	0	1	0	0	0	1	0	0	0	0	0	1	0	2
10. X-Ray Technician	81	0	0	0	5	0	1	4	0	0	1	0	0	1	0	0	7	0	1
11. Surgical Technician	30	1	0	0	6	0	0	1	0	0	1	0	0	0	0	0	7	0	0
12. Para-Medical Technician	25	1	0	0	4	0	0	0	0	0	1	0	0	0	0	0	3	0	0
13. Laboratory Technicians	172	0	0	0	0	0	1	2	2	0	2	2	0	0	0	0	1	0	0
14. Dieticians	5	1	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
15. Nurses Aides	159	0	0	0	0	2	0	2	0	0	2	1	0	0	0	0	0	1	0

To provide some form of comparison of job demand, it was necessary to determine a single, relative number for the supply of qualified workers in each job, another for the expected changes in the workers employed, and to relate these to the total number of workers. For the supply of qualified workers, this was done by changing the number of responses for surplus and scarce into per cents of the total responses for each job. A net figure, the supply index, was derived by subtracting the surplus per cent number from the scarce per cent number. The supply index was multiplied by the total number of workers to determine the demand score for that job based upon the present supply of qualified workers.

A similar procedure was used for the expected changes in the number of employees, with the responses for increase and decrease becoming the base for determining the change index. Multiplying the change index by the total number of workers showed the demand score for that job based upon the expected changes in the number of employees in the foreseeable future.

The worksheets used to compute the supply index and the change index for each of the major areas of workers (business, industrial, service, and health care) are in the Appendices 5-8. An analysis for each area follows.

Business Workers

There was a total of 27 different jobs, representing 26,669 workers, included under the category of business workers. Twenty-one of these were listed on the survey form and six were added by the firms responding.

The seven jobs having the greatest demand are listed in rank order below in two columns, the left according to the demand score based upon the supply index, and the right according to the demand score based upon the change index. Demand indices for all of the business workers jobs are in Appendix A-9.

Supply Index	Change Index
1. Sales or order clerks	1. Sales or order clerks
2. Supervisors	2. Supervisors
3. Managers or department heads	3. Sales representatives
4. Tellers	4. Secretaries
5. Secretaries	5. Tellers
6. Sales representatives	6. Typists and general office
7. Typists and general office	7. Managers or department heads

With the supply index reflecting a present need for more workers, and the change index showing expected future increases in the number of workers, indications are that the jobs in the above lists for business workers will be the jobs in greatest demand in the foreseeable future.

Industrial Workers

There were 43 different jobs, representing 7,060 workers, included in the category of industrial workers. Thirty-nine were listed on the survey form and four were added by the firms responding.

The seven jobs having the greatest demand are listed in rank order below, with the demand score based upon the supply index on the left, and the demand score based upon the change index on the right. Demand indices for all of the industrial workers jobs are in Appendix A-10.

Supply Index	Change Index
1. Machinists	1. Machinists
2. Sheet metal workers	2. Welders and flame cutters
3. Welders and flame cutters	3. Sheet metal workers
4. Structural steel fabricators	4. Technicians, electronic
5. Technicians, electronic	5. Mechanics, heavy equipment and diesel
6. Mechanics, heavy equipment and diesel	6. Draftspersons
7. Foremen, shop	7. Technicians, laboratory

Indications are that the jobs in the above lists for industrial workers will be the jobs in greatest demand in the foreseeable future. Those based upon the supply index reflect a present need and those based upon the change index show expected future increases.

Service Workers

This category of workers included 26 jobs and represented 7,740 workers. Of these jobs, 23 were in the survey form and four were added by the firms responding.

The six jobs having the greatest demand are listed in rank order below, with the demand score based upon the supply index on the left, and the demand score based upon the change index on the right. Demand indices for all of the service workers jobs are in Appendix A-11.

Supply Index	Change Index
1. Cooks	1. Truck/bus drivers
2. Diesel and heavy equipment repair	2. Cooks
3. Maintenance persons	3. Diesel and heavy equipment repair
4. Bakers	4. Waiters/waitresses
5. Food service management	5. Aircraft repair, A & P
6. Truck/bus drivers	6. Maintenance persons

Indications are that the jobs in the above lists for service workers will be the jobs in greatest demand in the foreseeable future. There is a present need for those shown under the supply index, and an anticipated future need for those under the change index. It is recommended that any changes in training programs for truck/bus drivers be planned in cooperation with the industry representatives, as a major portion of the number of drivers (62%) are employed by Metro that has its own training program.

Health Care Workers

There were 15 jobs included in this category, 12 on the survey form and three added by the respondents. They represented 2,191 workers. The five jobs having the greatest demand are listed in rank order below, with the demand score based upon the supply index on the left, and the demand score based upon the change index on the right. Demand indices for all of the health care workers jobs are in Appendix A-12.

Supply Index	Change Index
1. Nursing (registered)	1. Nursing (registered)
2. Nursing (practical)	2. Laboratory technicians
3. Laboratory technicians	3. Medical office assistants
4. Nurses aides	4. Nurses aides
5. Ward clerks	5. Nursing (practical)

Again, indications are that the jobs in the above lists for health care workers will be the jobs in greatest demand in the foreseeable future. The supply index reflects a present need for more workers, and the change index indicates expected future increases in the number of workers.

Composite Overview of Job Demand

To provide a composite overview of the job demand in the area served by South Seattle Community College, the findings for all of the occupational areas were combined. This was done by comparing the demand scores for each of the jobs and ranking them in order.

The 15 jobs in greatest demand are listed below. The demand based upon the supply index, showing the need for additional workers at the present time, is in the left column. The demand based upon the change index, showing expected future increases in demand, is in the right column.

Supply Index	Change Index
1. Sales or order clerks	1. Sales or order clerks
2. Supervisors	2. Supervisors
3. Machinists	3. Machinists
4. Managers or department heads	4. Sales representatives
5. Tellers	5. Secretaries
6. Secretaries	6. Tellers
7. Sales representatives	7. Typists
8. Sheet metal workers	8. Managers or department heads
9. Welders and flame cutters	9. Welders and flame cutters
10. Typists	10. Truck/bus drivers
11. Structural steel fabricators	11. Sheet metal workers
12. Cooks	12. Nursing (registered)
13. Technicians, electronic	13. Technicians, electronic
14. Nursing (registered)	14. Technicians, laboratory
15. Mechanics, heavy equipment and diesel	15. Cooks

Based upon the responses from the 490 business and industrial firms, indications are that the 15 jobs will be those in greatest demand. For the demand based upon the supply index, seven of the jobs are from the business workers area, six from industrial workers, one from services workers, and one from health care workers. The demand based upon the change index showed less emphasis on the industrial workers jobs and greater emphasis on the services and the health areas. It had seven jobs from the business workers area, four from industrial workers, two from services workers, and two from health care workers.

These results tend to parallel the findings of the Vocational Education Planning Study for the Seattle-King County Area, April, 1980.

Employees In-Service Job Training Information

This section of the survey was set up to determine the training needs of the workers in the area served by South Seattle Community College. The employers were asked several questions about employee training, and to indicate the kinds of training that would be helpful for employee job training.

Nearly half of the 424 responding, 47.6 per cent, stated that they had an organized training program for their technical and semi-professional employees. The most commonly listed training programs were on-the-job training and apprenticeship training.

Two hundred eighty-one (67.3 per cent) out of 431 firms responding, stated that employees with two years of post-high school training could perform some of the jobs now being done by four-year college graduates. Out of 271 of these respondents, 103 (38 per cent) stated that employees with two years post-high school training could do over half the jobs now being done by the four-year college graduates.

The employers were asked the extent to which they felt high school vocational programs were meeting their job training needs. Out of 426 responses, 3.8 per cent stated excellent, 29.6 per cent fair, 27 per cent poor, while 39.7 per cent said they didn't know.

The employers were then asked how well they felt existing educational institutions (including high schools) were meeting the general education needs of the employees and their families. Out of 425 responses, 10.4 per cent stated excellent, 55.1 per cent fair, 14.6 per cent poor, and 20 per cent don't know.

The employers strongly favored having appropriate training programs for employees who hadn't had adequate basic training. Out of 421 firms, 65.6 per cent said this was very important, 30.9 per cent rated it as fairly important, and only 3.6 per cent said it was not important. Out of 382 firms responding, 31.8 per cent thought there were types of post-high school training opportunities not now available to them that could be of assistance in providing better qualified employees or upgrading employee performance.

The employers were asked to check from a list of 74 specific kinds of training, classified into eleven instructional areas, those that they thought would be helpful for employee upgrading. They were asked to add any additional kinds of training that would be helpful. To provide a basis of comparison, an index of need was computed by determining what per cent the number of responses in an instructional area were of the total possible number of responses. The index of need is shown for each instructional area, according to the size of the firms responding, in Table 2-10. To illustrate how the index of need was computed, the area of air conditioning and refrigeration is used as an example. There were 490 firms that could have responded to each item, with 151 having 100 or more employees, 194 having form 26-99 employees, and 145 with 25 or less employees. There were two kinds of training listed in air conditioning and refrigeration. If each of the 151 firms with 100 or more employees had indicated both of the kinds of training, there would have been 302 responses. There were 21 responses, 7.0 per cent, indicating a need for one or the other of the two kinds of training. This provided a 7.0 index of need. The same procedure was followed for firms having 26-99 employees, 25 or less employees, and for the total of all three sizes.

TABLE 2-10

Index of Need for Employee Job Upgrading

Area of Instruction	Number of firms responding, by size: 100 and Over N-151	26-99 N-194	25 or Less N-145	Total N-490
Air Conditioning and Refrigeration	7.0	6.4	2.8	5.5
Blueprint Reading	5.3	4.1	3.4	4.3
Mechanics	4.5	3.6	3.1	3.7
Welding	14.9	11.3	8.3	11.5
Mathematics	11.6	9.1	7.8	9.5
Supervisory Training	36.4	26.0	19.7	27.3
Drafting	4.9	3.9	3.3	4.0
Electricity	8.5	4.2	3.0	5.2
Hydraulics	11.4	9.4	4.5	8.6
Business	17.6	12.0	9.3	12.9
General (Human Relations, Communications Skills, Personal Economics	32.0	18.6	17.5	22.4
Other (Food Production Management, Beverage Operation Management, Landscape Design)	4.9	4.0	0.5	3.2

The instructional areas ranked in order of need for job upgrading training were (1) supervisory training, (2) general (human relations, communication skills, personal economics), (3) business, (4) welding, (5) mathematics, (6) hydraulics, (7) air conditioning and refrigeration, (8) electricity, (9) blueprint reading, (10) drafting, and (11) mechanics. An analysis of each of the areas follows.

Kinds of Training That Would Be Helpful For Employee Job Upgrading

The responses for the kinds of training that would be helpful for employee job upgrading are analyzed in this section of the report. For each instructional area, the kinds of training are listed and the number of responses by size of the firms is shown. The index of need is shown in parentheses following the name of the instructional area.

In analyzing the data, it is important to keep in mind that an occupational instructional division may offer specific kinds of updating training from more than one instructional area. Motor vehicle maintenance, for example, might offer parts of the mechanics, electricity, welding, and hydraulics instructional areas.

Supervisory Training (27.3)

The need for supervisory training was checked by more than one-fourth of the total possible respondents (27.3 per cent). The specific kinds of training listed and the number of firms responding to each is shown below. Column A has the number of firms with 100 or more employees, Column B those with from 26-99 employees, and Column C those with 25 or less employees. Column T is the total number of firms that indicated a need for that kind of training.

Supervisory Training	A	B	C	T
Foreman	35	38	17	90
Administrative and management	75	63	40	178

All three sized groups indicated a need for supervisory training. Each indicated a stronger need, though, for administrative and management training than for foreman training. There was a greater difference in the need for the firms having 25 or less employees than for the others. The responses indicate that the firms recognize the importance of having trained and updated personnel in supervisory positions.

General (Human Relations, Communication Skills, Personal Economics (22.4)

This instructional area ranked second on the index of need, with 22.4 per cent of the possible respondents checking it. There was about the same expressed need for human relations and communication skills, but considerably less for personal economics.

General	A	B	C	T
Human relations	58	47	29	134
Communication skills	68	47	31	146
Personal economics	19	14	16	49

In addition to the above, four firms expressed a need for upgrading training in handwriting.

These responses indicate that business and industry sees an importance for upgrading training in the "people relationships" area.

Business (12.9)

The business instructional area ranked third on the index of need. There were 23 kinds of training as listed below.

Business	A	B	C	T
Operations and management	61	60	38	159
Marketing	37	38	20	95
Salesmanship	35	57	44	136
Color, line and design	7	5	10	22
Advertising and display	10	13	17	40
Real Estate	14	8	7	29
Finance	23	14	9	46
Money and banking	12	15	15	42
Insurance	10	16	8	34
Investments	8	7	6	21
Economics of business	24	24	12	60
Statistics	12	10	3	25
Communications (grammar, speech, etc.)	51	40	22	113
Report writing	36	21	14	71
Data processing and programming	31	18	4	53
Data entry operations	39	21	3	63
Business methods and systems	29	30	12	71
Accounting	49	41	24	114
Word processing	25	18	5	48
Machines operations	16	13	5	34
Shorthand	19	11	6	36
Machine transcription	17	11	4	32
Typewriting	45	45	21	111

The five for which most need for upgrading training was expressed were:

(1) Operations and management
(2) Salesmanship
(3) Accounting
(4) Communications
(5) Typewriting

Four firms listed buying, and one firm listed traffic management.

Welding (11.5)

A need for training in welding was indicated by 11.5 per cent of the possible respondents. Seventy-four checked basic welding as needed for employee upgrading, and 39 checked welding technology.

Welding	A	B	C	T
Basic	27	30	17	74
Technology	18	14	7	39

Mathematics (9.5)

The greatest need in this area was for basic mathematics and applied mathematics. The least expressed need for upgrading training was in metrics. These responses indicate a need for a basic knowledge of mathematics that relates to an occupational use.

Mathematics	A	B	C	T
Basic	39	37	30	106
Geometry and trigonometry	5	15	7	27
Metrics	6	8	6	20
Applied business	28	20	12	60
Mechanics	10	7	4	21
Calculator	17	19	9	45

Hydraulics (8.6)

Within the hydraulics area of instruction, fundamentals and equipment maintenance were most needed. This reflects the demand for properly trained mechanics and technicians.

Hydraulics	A	B	C	T
Fundamentals	18	24	8	50
Pumps, valves, controls	17	21	7	45
Circuits	12	11	4	27
Equipment maintenance	22	17	7	46

Air Conditioning and Refrigeration (5.5)

The responses for this area show a much greater need for equipment servicing training than for basic theory. This would reflect the increasing number of air conditioning and refrigeration units and a resulting need for having qualified service persons.

Air Conditioning and Refrigeration	A	B	C	T
Theory	8	9	4	21
Equipment servicing	13	16	4	33

Electricity (5.2)

The responses for the electricity instructional area show the greatest need is for AC and DC fundamentals, electrical equipment maintenance, electric control devices, and basic electronics.

Electricity	A	B	C	T
DC and AC fundamentals	18	24	12	54
Transformers, alternators, controllers	16	8	5	29
Electrical equipment maintenance	20	12	8	40
Electric control devices	14	14	6	34
Tubes and transistor circuits	8	0	1	9
Electronic equipment service	13	8	2	23
Thermometry and pyrometry	6	1	1	8
Basic electronics	16	11	7	34
Instrumentation	8	7	2	17
Computer servicing	9	1	0	10
Computer sciences	14	3	4	21

Blueprint Reading (4.3)

Although this instructional area was ninth on the index of needs ranking, there were 40 firms that indicated a need for upgrading training in machine drawings, and 31 that indicated a need for electrical/electronic circuits. The ability to read blueprints is a basic requirement in most industrial occupations, and training may be offered as an integral part of another area.

Blueprint Reading	A	B	C	T
Machine drawings	15	16	9	40
Automation equipment layouts	4	2	1	7
Electrical/electronic circuits	11	14	6	31
Jigs and fixtures	6	5	4	15
Sheet metal	8	10	5	23
Fluidics	6	3	3	12
Structural steel and concrete	6	5	7	18

Drafting (4.0)

Drafting, ranking tenth on the index of need, showed the greatest need for elementary drafting and for mechanical drafting.

Drafting	A	B	C	T
Elementary	15	16	7	38
Mechanical, architectural and civil	7	9	8	24
Detailing, machine and tool	6	6	4	16
Descriptive geometry	2	2	2	6
Design, machine and tool	7	5	3	15

For both blueprint reading and drafting, it seems advisable to work closely with industry to determine exactly what kind of training each particular group needs.

Mechanics (3.7)

The mechanics instructional area was the lowest ranking area on the index of need. However, many aspects of training that are closely related to mechanics are shown in some of the other areas. Also, the demand for aircraft repair and aircraft production reflects the small number of aviation firms in the geographic coverage of this portion of the survey.

Mechanics	A	B	C	T
Automotive service testing	5	7	5	17
Heavy equipment and diesel repair	17	20	7	44
Fuel and injection	5	6	4	15
Aircraft repair, A&P	2	2	1	5
Aircraft production	1	1	3	5
Automotive repair	11	6	7	24

Other

This area was set up to include kinds of training that did not fit into any of the other areas of instruction. It included food production management, beverage operation management, and landscape design. In addition to these, two of the respondents listed a need for employee upgrading training in food service management.

Other	A	B	C	T
Food production management	15	14	2	31
Beverage operation management	6	8	0	14
Landscape design	1	1	0	2

Analysis of Job Upgrading Needs

To provide adequate coverage for each of the instructional areas relating to employee job upgrading needs, there has been some overlapping of kinds of training. For example, communications skills is listed under the general instructional area, and communications (grammar, speech) is listed under the business area. Therefore, a composite overview has not been made for employee job upgrading needs.

An analysis of the kinds of training needed for employee job upgrading shows the greatest need in the areas involving "people relationships" represented by the supervisory training instructional area, and the general instructional area; i.e., human relations, communications skills. Within the business instructional area, operations and management was most needed, followed by salesmanship, accounting, and communications. The basic or fundamental courses were needed most for employee job upgrading in the welding, mathematics, hydraulics, electricity, and drafting instructional areas. Maintenance and equipment servicing were highest with air conditioning and refrigeration, and mechanics, and second in need for hydraulics.

The information requested from the employers about their supply of workers was based upon occupational areas as these were the most easily identifiable categories. The information requested about employee job upgrading training needs was based upon instructional areas as training from one instructional area may serve several occupational areas; i.e., supervisory training could serve all of the occupational areas.

Although different bases were used for obtaining the information, a general comparison can be made of some of the responses concerning the supply of workers with those concerning the job upgrading training needs. For example, the demand for supervisors was high, ranking second on both the demand based upon the supply index and that based upon the change index. The supervisory training instructional area ranked highest on the index of need for employee job upgrading training. Seven of the kinds of jobs in greatest demand on both the supply index and the change index are from the business workers' area. The business area of instruction ranked third out of 11 areas in the need for employee job upgrading training.

A comparison for each of the above examples shows (1) a current need for more qualified workers in the occupational areas involved, (2) an expected increase in the number of employees in the foreseeable future, and (3) a need for job upgrading training for the present employees. In effect, the responses indicate a need for more workers as well as a need for the present ones to do their jobs better. Possibly the latter is receiving more emphasis than it otherwise might since there is a shortage of workers in the occupational areas involved.

Vashon Island Survey

A separate study was made of Vashon Island because of its geographic separateness. All of the businesses that would have technical or semi-professional level employees, 67, were included. Thirty-four responses were received for a 50.7 per cent return. The findings from the Vashon Island survey were similar to those from the basic geographic area. The jobs in most demand were supervisors and managers or department heads. The greatest needs for employee upgrading training were in the supervisory training, general (human relations, etc.), business, and mathematics instructional areas. The report for this survey is in Appendix A-13.

The results of this study were combined with another study done by South Seattle Community College's Division of Continuing Education to provide the basic information leading to the establishing of an off-campus center on Vashon Island.

Extended Area Survey Coverage

An extended area survey was made for each instructional division having an area of service that extended beyond the established geographic boundaries of the college. They were aviation maintenance, food services and hospitality, horticulture, and motor vehicle maintenance.

The area of coverage for each survey was determined through use of the division's mailing list. The firms to be surveyed were selected on a random sample basis and sent the same cover letter and survey form that were used within the geographic area. The responses had to be treated separately as the area of coverage differed for each instructional division. However, there were many related area jobs within the geographic area of the college that could be served by the division involved. Therefore, a special report was given each of these divisions that combined the responses from the extended area with those from the related jobs and occupational areas within the geographic area. The related jobs and occupational areas were determined through a meeting with the appropriate division chairperson or coordinator.

Each report shows the number of firms responding, their size, and the number of employees they represent. A description of each extended area survey follows.

Aviation Maintenance

The coverage for aviation maintenance extended nationwide. Survey forms were sent to 155 firms of which 19 (12.3 per cent) responded. These responses, combined with those from related occupational areas within the geographic survey area, comprised 102 responses from 16 occupational areas. A copy of the report is in Appendix A-14. It includes a summary of the survey responses, a list of the occupational areas included in the summary, and a listing of the firms from the extended area that responded.

The kind of job in greatest demand was aircraft mechanic, A&P. Within the industrial workers area, 5 out of 11 firms stated that the supply was scarce, and 8 out of 11 stated they expected to increase the number of employees in the foreseeable future. In the service workers area, 7 out of 12 firms stated the supply of qualified workers was scarce, and 6 out of 11 plan to increase their number of employees. Fifteen of the firms listed aircraft repair, A&P, training as needed for employee job upgrading training.

Hospitality and Food Sciences

The extended area of coverage for hospitality and food sciences was a greater Seattle area. It included a listing of 60 firms from which 18 returns (30 per cent) were received. These were combined with the responses from the related areas within the geographic survey area for a total of 78 responses representing 18 occupational areas. A copy of the report is in Appendix A-15. It includes a summary of the survey responses, a list of the occupational areas included, and a listing of the firms from the extended area that responded.

Cooks, bakers, and food service management workers were in greatest demand according to the respondents. The expected changes in the number of employees in the foreseeable future showed a large increase in the number of cooks with 17 out of 55 firms planning an increase. For employee job upgrading training, there were 38 firms that listed food production management, 33 listed human relations, and 30 listed administrative and management.

Horticulture

The extended coverage for horticulture included 28 firms within a regional area. There were 18 responses (64.3 per cent), A copy of the report is in Appendix A-16. It includes a summary of the survey responses, a list of the occupational areas covered, and a listing of the firms that responded. There were no responses from the geographic survey area. Due to the small number of respondents, it is difficult to show a specific direction for most of the survey coverage. However, the responses indicate that for landscape maintenance, the supply of workers was scarce, an increase in the number was expected in the foreseeable future, and employee job upgrading training was needed. A surplus was indicated for workers in landscape design and none of the firms expected to increase the number of workers in that area. The instructional areas most needed for employee job upgrading were supervisory and business.

Motor Vehicle Maintenance

The motor vehicle maintenance extended area was nationwide with most being within a regional area. There were 134 firms contacted and 23 (13.5 per cent) responded. Combining these with the related occupational area responses from the geographic survey area made a coverage of 73 firms, representing 18 occupational areas. The report is in Appendix A-17. It includes a summary of the survey responses, a list of the occupational areas included in the summary, and a list of the firms from the extended area that responded.

Within the industrial workers area, motor vehicle mechanics were listed as scarce by 9 out of 17 firms, and 10 expect an increase in the number employed. For the service workers area, 4 out of 10 firms listed auto repairman as scarce, and 5 expect an increase in the number employed. For the industrial workers area, 7 out of 10 firms showed heavy equipment and diesel mechanics as scarce, and 5 out of 10 expect an increase in the number of workers. Within the service workers area, 6 of 9 showed them as scarce and 2 out of 7 expect an increase. There were no firms showing a surplus for motor vehicle mechanics or heavy equipment and diesel mechanics, and none expected a decrease in the number of workers. The kinds of training indicated most often for employee job upgrading were automotive repair, heavy equipment and diesel, and administrative and management.

Special Interest Survey

A special interest survey was made of the travel agency industry to learn about its needs and future directions. Several of the leaders in the industry were contacted by telephone and in person. Survey forms were sent to 28 agencies, representing 40 offices. Responses were received from 17 of the agencies, representing 28 offices. A copy of the summary report is in Appendix A-18. It includes a summary of the survey and a listing of the agencies that responded.

Travel consultants were listed as scarce by 9 out of 14 respondents, and 11 of the 14 expect an increase in the number of travel consultants employed. The kinds of training needed for employee job upgrading were basic

mathematics, salesmanship, human relations, communications skills, typing, and geography. The industry leaders contacted were interested in helping to develop training programs, both for persons wanting to enter the travel agency industry and for the upgrading of present employees.

Summary

A summary of the information obtained from the business-industry survey is as follows:

(1) The 490 firms responding classify 51.5 per cent of their 84,759 employees as technical and semi-professional level workers.

(2) The greatest need for qualified workers both at the present time and expected in the future is in the business occupational area.

(3) The specific jobs in greatest demand by occupational area are:
Business - sales or order clerks and supervisors.
Industrial - machinists, sheet metal workers, and welders and flame cutters.
Service - cooks and heavy equipment/diesel mechanics.
Health Care - registered nurses and laboratory technicians.

(4) Nearly half of the firms (47.6 per cent) stated that they had an organized training program; most listed on-the-job or apprenticeship training.

(5) Thirty-eight per cent of the firms stated that workers with two years post-high school training could do over half the jobs now being done by four-year college graduates.

(6) Of the respondents, 3.8 per cent thought the high school vocational programs were doing excellent in meeting their job training needs, 29.6 per cent fair, and 27 per cent poor.

(7) Nearly two-thirds of the employers (65.6 per cent) thought it very important to have appropriate training programs for employees lacking adequate basic training.

(8) There were 31.8 per cent of the employers that thought there were types of post-high school training programs not now available to them that would be helpful for the upgrading of their current employees.

(9) For employee job upgrading training, the greatest need was in the "people relationships" areas; i.e., supervisory training, human relations, communications skills. This was followed by a need for training in the business instructional area.

Conclusions

1. Of the 43,660 technical and semi-professional workers represented by the 490 firms responding to the survey, 40 per cent are in some form of service occupation (finance, insurance, real estate, services, public administration) and another 33 per cent are in retail and wholesale trade. The need for these kinds of workers is substantiated by the supply and change indices which show sales or order clerks, supervisors and managers, sales representatives, and office workers among the top jobs in greatest demand. When asked about training needs, respondents listed supervisory and management training, business classes, human relations and communication skills most often. The implication for the college's business and office occupations division is clear. This division can anticipate increasing demand for training in all areas of its curriculum, with particular emphasis in salesmanship and in supervisory training.

2. Based upon the demand score that relates the supply and anticipated changes in numbers of workers to the total number employed, there appears to be a need for the training of machinists, welders and flame cutters, and sheet metal workers in the industrial area.

3. Since 47.6 per cent of the firms responding have organized training programs, and 38 per cent consider workers with two years of post-high school training capable of doing over half the jobs now being performed by four-year college graduates, the community college should work closely with business and industry to (1) determine what training can be done more effectively at business sites and what in the community college setting, (2) plan the training to be done at the community college, (3) assist the firms in planning and conducting their training programs, and (4) determine types of training that could be offered to provide the two-year graduates an opportunity to handle higher level jobs.

4. Since 96.5 per cent of the employers responding to the survey favored having training programs organized for employees who lack basic training, it appears developmental education will play an increasingly important role in the college's curriculum.

Chapter III: RESIDENTIAL COMMUNITY

The purpose of this part of the survey was to learn about the backgrounds, interests, and needs of the residents in the geographic area served by South Seattle Community College. The area boundaries were Lander Street on the north, Lake Washington on the east, South 128th Street on the south, and Puget Sound on the west. Although Vashon Island is part of the service area of South Seattle Community College, it was excluded from the residential community survey because the office of continuing education had recently conducted a survey on the island to determine interest in adult education courses. It was believed that two surveys close together, covering in part the same questions, might be counterproductive and result in biased responses.

Since there is a wide diversity of socio-economic conditions existent in the area served by SSCC, it was divided into nine sub-regions consisting of communities whose residents appear to be fairly homogenous in income, social position and attitudes. Six of the sub-regions provided coverage of the entire geographic area with the exception of public housing centers managed by the Seattle Housing Authority. The remaining three covered the High Point, Holly Park, and Rainier Vista public housing centers. A list of the nine sub-regions, showing the communities they represent, their population, number of housing units, and a map follow.

Sub-region	Population*	Number of Housing Units*
1. West Seattle, Fauntleroy, Arbor Heights	48,452	18,122
2. Highland Park, Delridge	14,911	5,283
3. Georgetown, Duwamish Valley, South Park	2,532	1,078
4. Rainier Valley, Columbia, Holly Park, Rainier Beach	51,532	18,558
5. White Center, Shorewood, Allentown, Skyway	35,493	11,760
6. Mt. Baker, Beacon Hill	2,641	921
Totals (Geographic Area)	155,561	55,722
7. High Point Public Housing Center	1,959**	697**
8. Holly Park Public Housing Center	2,047	766
9. Rainier Vista Public Housing Center	1,008	480
Totals (Public Housing Centers)	5,014	1,943

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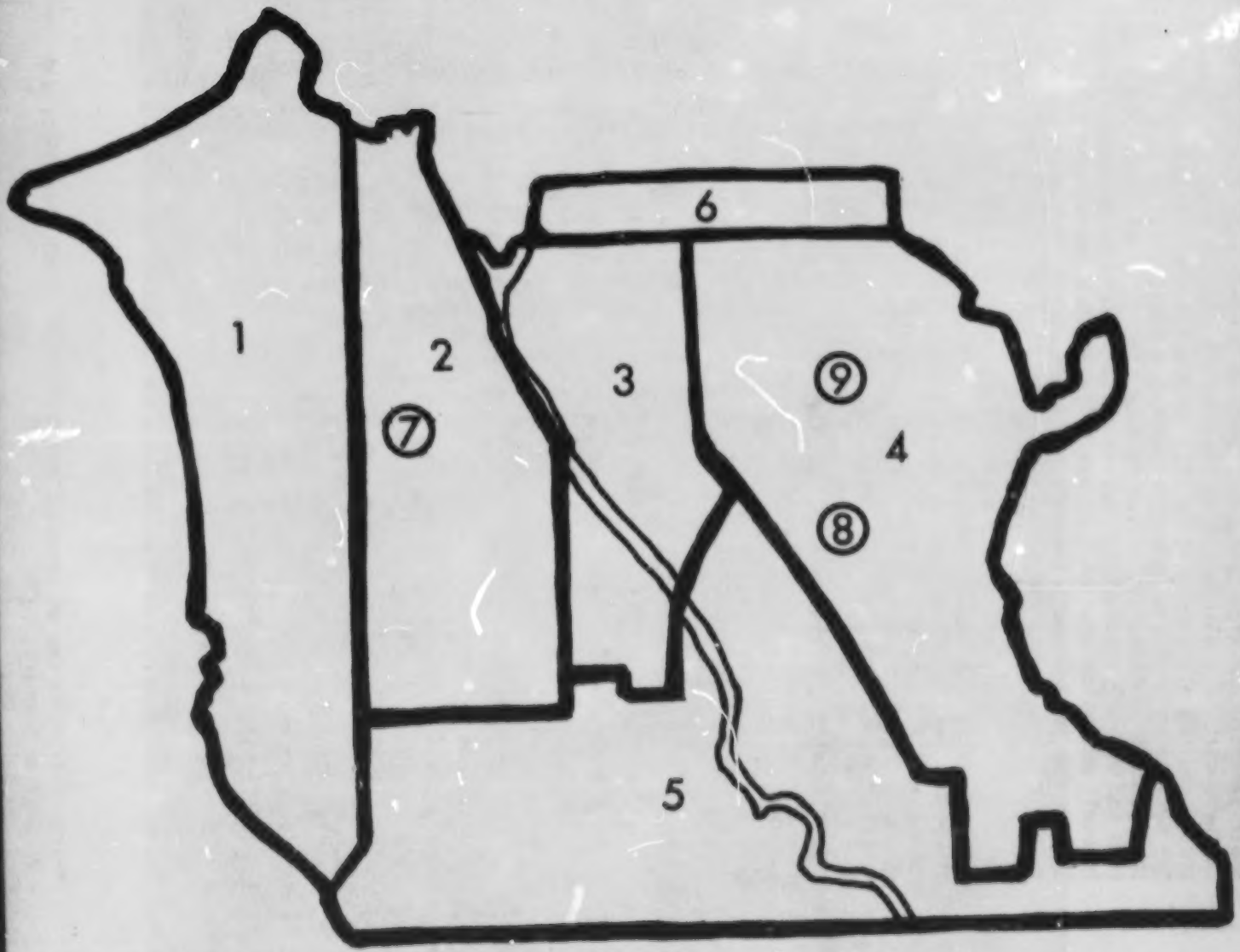
*Figures from Bureau of Census Characteristics of Housing Units and Population Summary, 1970.

**From City of Seattle Housing Authority, 1979.

RESIDENTIAL COMMUNITY SURVEY

SUB-REGIONS



A review of the 1970 Bureau of Census Characteristics of Housing Units and Population Summary showed 57,665 households in the geographic area. Within this, the Seattle Housing Authority had an occupancy of 1,943 units, with High Point having 697, Holly Park 766, and Rainier Vista 480. A sample of one thousand households was selected for the survey from sub-regions one through six which represented 1.8 per cent of the total number of households in the six regions. Anticipating that residents of public housing might have greater need for educational programs and that a larger sample would be advisable, the sample was increased to 10 per cent of the households in regions seven, eight and nine.

Procedure

The survey was conducted with a cluster sample approach and personal interviews. Using the Bureau of Census Housing Tract listing and a table of random numbers to select a starting point, the southwest corner of every ninth block was selected as a base point. Each of the 250 base points chosen in this manner was expanded into a two block area, within which four household interviews were conducted following a specific selection procedure. The interviews were conducted by 43 persons, 10 from South Seattle Community College and 33 from the residential community, all of whom were specifically trained for this purpose.

The survey instrument was developed and reviewed by South Seattle Community College administrators and field-tested by four interviewers, each of whom conducted two interviews in different areas of the community. A copy of the revised survey instrument is in Appendix B-1.

As the interviews progressed, some of the areas selected were found to be parks or industrial areas not shown on the map. These areas were eliminated and, whenever possible, replaced. Upon completion of the survey, 1,127 interviews had been conducted; 930 in sub-regions one through six for a 1.7 per cent sample, and 197 in the public housing areas for a 10.1 per cent sample. Table 3-1 shows the number of persons interviewed in each sub-region. The numbers in the upper left corner of the boxes in the "total" column show the per cent each sub-region was of the total; i.e., there were 298 interviews in sub-region one which was 26.4 per cent of the total number of interviews. The differences in the number of interviews in the sub-regions reflect the residential-industrial composition of each; i.e., sub-region 1 is heavily residential, 2 a mixture, while 3 and 6 are heavily industrial regions.

TABLE 3-1

Number of Interviews by Sex and Sub-Region

Sub-Region	Male	Female	Total
1	137	161	26.4 298
2	38	52	8.0 90
3	10	13	2.0 23
4	137	177	27.9 314
5	83	93	15.6 176
6	7	22	2.6 29
7	13	57	6.2 70
8	15	63	6.9 78
9	19	30	4.3 49
Totals	459	668	100 1127

Characteristics of the Respondents

Four hundred fifty-nine of the 1127 persons interviewed were males (40.7 per cent of the total), and 668 (59.3 per cent) were females. Nearly one-third (32.4 per cent) were from 18-30 years of age, 19.3 per cent were from 31-40, and 12.4 per cent were over 65. Table 3-2 shows the number, by sex, interviewed in each age group, with the per cent of the total for each age group included in the "total" column. The number in the upper left of each box is the per cent and in the lower right is the number of respondents.

TABLE 3-2

Number of Respondents by Age Group

Age Group	Male	Female	Total
18-20	27	38	5.8 65
21-25	42	83	11.1 125
26-30	76	99	15.5 175
31-40	80	137	19.3 217
41-50	65	88	13.6 153
51-60	61	99	14.2 160
61-65	30	48	6.9 78
Over 65	71	69	12.4 140
No Response	7	7	1.2 14
Totals	459	668	100 1127

The geographic area covered in the survey has a relatively stable population with more than half, 55.4 per cent, having lived in the area over ten years, 68.6 per cent over five years, and only 8 per cent less than one year.

One-fourth (25.3 per cent) of the persons interviewed completed high school, 26.3 per cent graduated from or attended a community college, 7.5 per cent attended a vocational-technical or business school, and 17 per cent completed a four-year college program or more. On the other end of the education spectrum, 23.6 per cent of those interviewed had less than a high school education. Table 3-3 contains this information. Considering only the academic level attained, it appears 48.9 per cent or more of the respondents could logically be served by a community college.

TABLE 3-3

Last Grade of Formal Schooling Completed
(By per cent of respondents)

Level of Schooling	Male	Female	Total
8th Grade or Less	7.2	10.3	9.1
Some High School	14.8	14.2	14.5
High School Graduate	21.4	28.0	25.3
Voc-Tech or Business School	9.6	6.1	7.5
Some Com. College or College	20.9	23.2	22.3
Community College Graduate	4.4	3.7	4.0
4 Year College Graduate	11.1	8.1	9.3
Some Graduate Work	6.2	3.0	3.9
Completed a Graduate Degree	5.0	3.0	3.8

To learn about the present educational and training involvement of the residents, each respondent was asked how many household members over 18 were participating in programs offered by a school, a place of employment, or a community agency at the present time. Two hundred thirty-six households (20.9 per cent of those contacted) had persons in a school program, 97 (8.6 per cent) at their place of employment, and 80 (7.1 per cent) at a program offered through a community agency. There was a slightly higher per cent of the households in the three public housing areas having members in a school (24.3 to 25.6 per cent) or community agency program (10.2 to 11.5 per cent), indicating that the educational and training outreach efforts located in the centers may be proving successful in reaching people. The number of members per household participating is shown in Table 3-4, with the category for school divided into full-time and part-time students. For example, there were 117 households with 1 student enrolled in school full-time, 20 with 2, 4 with 3, and 1 with 4.

TABLE 3-4

Number of Households With Number of Members in an Educational, Training, or Cultural Program

	Number Per Household			
Educational/Training Program	1	2	3	4
School, Full-Time	117	20	4	1
School, Part-Time	92	12	1	2
Place of Employment	83	10	2	0
Community Agency	67	10	3	0

To gain more information about the respondents' own educational experiences, they were asked if they had ever been in an adult education program, defined as a learning program that did not lead to a degree. Nearly half of the respondents, 540, stated they had, and 236 of these said it was within the past two years. Changing these figures to per cents would indicate that 47.9 per cent of the residential population have been in an adult education program with 20.9 per cent within the past two years. This indicates a high level of interest on the part of the residents for educational, cultural or special interest activities or programs.

The respondents learned about the adult education program they had been in through friends (11.7 per cent), reading (12.8 per cent), radio and television (1.4 per cent), and their employers (7.8 per cent). A number stated "other" and most of these persons noted published class schedules as their source of information. In an evaluation of the programs, 44.0 per cent said the program was useful, 42.9 per cent said it was interesting, and 31.4 per cent stated that if they could go back, they would enroll in the program again.

Although 31.7 per cent of the persons interviewed stated they thought there were some types of educational-cultural services or activities that should be available, few suggestions were offered, and some of those were for academic or occupational classes. The educational-cultural services or activities suggested by three or more persons, with the number making the suggestion in parentheses, were:

- Activities for Senior Citizens (18)
- Cultural Activities (10)
- Arts and Crafts (8)
- Recreational Center (4)
- Theatre, Plays, Acting (4)
- Performing Arts (4)
- Single Person Education (4)
- Photography (3)
- Assertiveness Training (3)
- Managing Personal Finance (3)
- Job Placement Services (3)
- Retirement Planning (3)
- Current Events Discussions (3)
- Political System Discussions (3)
- Music Activities (3)
- Social Interaction Classes (3)
- Community Center (3)

To help determine the respondents' familiarity with the community colleges in the area, they were asked to indicate which campuses they had visited. The responses, Table 3-5, show that 38.5 per cent of the respondents have been on the South Seattle Community College campus and one-third on the campus of Seattle Central Community College. Table 3-5(A), covering the individual sub-regions, indicates that the residents tend to visit the nearest campus since a high per cent of the respondents in sub-regions one and two have been to South Seattle, those in sub-region six to Seattle Central, and those in five to Highline.

TABLE 3-5

Community College Campuses Respondents Have Visited
(By per cent of Respondents)

Community College	Male	Female	Total
South Seattle Community College	40.3	37.3	38.5
Seattle Central Community College	35.5	31.7	33.3
North Seattle Community College	15.9	12.3	13.8
Highline Community College	26.4	23.2	24.5
Green River Community College	13.9	9.1	11.1

TABLE 3-5(A)

Community College Campuses Visited by Sub-Regions
(By per cent of Respondents in each Sub-Region)

	Sub-Area								
Community College	1	2	3	4	5	6	7	8	9
South Seattle Community College	55.4	48.9	30.4	20.4	41.5	20.7	68.6	21.8	20.4
Seattle Central Community College	31.5	24.4	30.4	42.4	18.2	44.8	44.3	30.8	38.8
North Seattle Community College	16.8	12.2	17.4	15.0	11.4	17.2	15.7	5.1	6.1
Highline Community College	26.8	31.1	30.4	19.4	45.5	3.4	21.4	2.6	4.1
Green River Community College	13.4	14.4	21.7	8.9	15.9	3.4	7.1	5.1	2.0

A list of reasons given by people for not participating in educational, occupational training, or cultural activities was shown to the persons interviewed, and they were asked which would be of concern to them. Table 3-6 shows the responses. Since "not enough time," "family responsibilities," and "work schedule" were the most common reasons, the need for flexibility in the time and place of programs and activities becomes apparent. The respondents from the Holly Park and Rainier Vista public housing centers had as a major concern "don't know what is available," checked by 39 per cent in each, while the High Point public housing center respondents had less concern about this, 19 per cent, possibly reflecting the geographic closeness of High Point to the South Seattle Community College campus.

TABLE 3-6

Reasons for Not Participating in Educational, Occupational Training, or Cultural Activities
(By per cent of Respondents)

Reason	Male	Female	Total
Not Enough Time	36.6	33.4	34.7
Family Responsibilities	20.9	27.4	30.7
Work Schedule	32.0	24.6	27.6
Think I Won't Succeed	7.2	7.0	7.1
Too Tired at End of Day	15.5	17.7	16.8
Don't Know What Is Available	20.5	25.1	23.2

Employment-Related Information

At the time of the survey, 52.5 per cent (592) of the persons interviewed were employed, including 65.4 per cent of the males and 43.7 per cent of the females. This per cent may seem low in comparison with the Department of Employment Security's figures for King-Snohomish Counties (6.1 per cent unemployed, May, 1980), but it is based upon all of those interviewed, whereas the Employment Security figures are based only upon the number of persons working or looking for work. Table 3-7, with the per cent of each sex that is employed by age groups, shows the highest percentages of males employed are in the 31-40 (87.5 per cent) and 26-30 (81.6 per cent) age groups, while for the females it is in the 41-50 (55.7 per cent) and 31-40 (53.3 per cent) age groups.

TABLE 3-7

Employment Status by Age Groups
(By per cent of Respondents)

Age Group	Male	Female	Total
18-20	40.7	44.7	43.1
21-25	71.4	51.8	58.4
26-30	81.6	45.5	61.1
31-40	87.5	53.3	65.9
41-50	75.4	55.7	64.1
51-60	63.9	49.5	55.0
61-65	63.3	10.4	30.1
Over 65	23.9	8.7	16.4

Out of the 592 respondents employed, 233 (39.4 per cent) have worked for their present employer (or have been self-employed) for over five years, 222 (37.5 per cent) from one to five years, and 137 (23.1 per cent) less than one year. Nearly half, 45.9 per cent, were very satisfied with their present jobs, 35 per cent moderately satisfied, 13.3 per cent a little dissatisfied, and 5.7 per cent very dissatisfied. Table 3-8, with this information, indicates that more females than males are a little or very dissatisfied (24.6 per cent to 13.6 per cent) with their present jobs. Comparing the responses within each sex indicates a ratio of over ten males very satisfied with their present jobs for every one that is very dissatisfied. The ratio for females is not quite six to one.

TABLE 3-8

Job Satisfaction of Employees
(By per cent of Employed Respondents)

Extent of Satisfaction	Male	Female	Total
Very Satisfied	50.0%	41.8%	45.9%
Moderately Satisfied	36.3%	33.6%	35.0%
A Litt.e Dissatisfied	9.3%	17.4%	13.3%
Very Dissatisfied	4.3%	7.2%	5.7%

Of the 592 who were employed, 348 needed specialized training to obtain their present positions, and out of these, 171 (49.1 per cent) received the training on the job, 37 (10.6 per cent) at a vocational or trade school, 36 (10.3 per cent) at a community college, and 104 (29.9 per cent) at other sources. The responses under "other" were four-year college or university, combinations of various kinds of schools, and combinations of schools and on-the-job.

In response to a question as to how far they had progressed in their present line of work, 217 of the 592 employed (36.7 per cent) thought they had progressed about as far as they could, 321 (54.2 per cent) thought they probably could progress further, and 54 (9.1 per cent) didn't know.

Three hundred twenty-five of those employed (54.9 per cent) felt they could go further in their present line of work with training to upgrade their knowledge and skills. The types of training suggested, with the number of respondents suggesting each in parentheses, were:

Management	(34)	Trade Skills	(6)
Accounting	(15)	Data Processing	(5)
Supervision	(10)	Communications	(5)
Business Admin.	(10)	Engineering	(4)
Computer Science	(7)	Nursing	(4)
Office Skills	(7)	Cooking/Baking	(4)

The larger number of responses for management, accounting, supervision, and business administration may indicate persons wanting to advance in or into managerial level positions. The smaller number for some of the skill areas, i.e., trade skills, cooking/baking, may indicate those employees have received sufficient training at that job level.

There were 324 (54.7 per cent) of the persons employed who stated that their employers support the employees continuing with occupational education or training. The support provided is shown in Table 3-9, with the largest number giving encouragement and moral support, the next largest providing the training programs needed, and the third providing time for training. Those listing "other" specified combinations of the above or made statements such as, "I am the owner." These responses indicate that the employers recognize the importance of and are encouraging their employees to continue their education or training. The per cents shown total over 100 as several listed more than one type of support provided.

TABLE 3-9

Support Employers Provide for Education or Training
(By per cent of those Employed)

What Does Employer Provide	Male	Female	Total
All Tuition and/or Fees	25.0	17.8	21.5
Some of Tuition and/or Fees	16.7	13.0	14.9
Training Program Needed	26.3	25.7	26.0
Encouragement & Moral Support	28.7	26.7	27.7
Time for Training	26.0	24.0	25.0
Other	5.0	5.5	5.2

Information Relative to Possible Participation in Activities

To learn about their interests and concerns if they were to participate in educational, occupational training, or cultural activities, all of the respondents were asked what their purposes would be, what might be impediments to their participating, when and where they would prefer classes, and about some specialized methods of learning they may have used. Over half, 648, had for their purpose "to learn something of general interest," while "to learn something to use in my spare time," was second with 472. Table 3-10 shows this information. Purposes listed under "other," with the number of persons listing them in parentheses, were:

Self Improvement	(14)	Learn Own Job Better	(4)
Own Pleasure	(12)	Get a Degree	(3)
Learn Other Occupations	(11)	Recreational	(2)
Better General Knowledge	(11)	Crafts	(2)

TABLE 3-10

Purposes for Participating in Educational, Occupational Training, or Cultural Activities
(By Number of Respondents)

Purposes	Male	Female	Total
Learn Something of General Interest	250	398	648
Learn How to Handle Problems of Living	142	268	410
Learn How to Do Job Better	187	237	424
Learn Something for Spare Time	187	285	472
Complete a Program	87	144	231
Meet New People	137	265	402
Other	58	93	151

From a list of possible impediments to their participating in educational, occupational training, or cultural activities, 447 checked having to pay; 436, wanting to receive a certificate; 404, a need for transportation; 345, having friends and family members also participating; and 297, the provision of child care.

There were about an equal number who would prefer having classes at a community college campus, 449; and at the nearest elementary or high school, 450. See Table 3-11. Two of the public housing areas gave preference to a community center, and the third had a community center and a community college campus nearly equal. The locations listed under "other" included "at my home," "at my church," and combinations of those listed above.

TABLE 3-11

Preferred Location of Classes
(By Number of Respondents)

Location	Male	Female	Total
Community College Campus	212	237	449
My Work Location	32	46	78
Nearest Elementary or High School	152	298	450
Community Center	100	227	327
Other	52	88	140

Classes were preferred on Monday through Thursday (with 30-33 per cent of the persons interviewed checking each) over Friday (19.9 per cent) and the week-ends (Saturday, 7.2 per cent; Sunday, 4.6 per cent; a week-end combination, 7.1 per cent). Evening was the preferred time of the day for classes (42.8 per cent); however, the public housing areas and sub-region 6 had a preference for classes during the day (60-80 per cent of those inteviewed), probably reflecting the nature of their residential areas.

Several methods of learning were listed and the persons interviewed were asked which they had used and whether or not they liked them. Table 3-12 contains their responses. The largest number, 319, had used supervised independent study with 280 (88 per cent of those using it) stating they liked it; the second largest number, 285, had used tapes or records with 238 (83.4 per cent) liking them.

TABLE 3-12

Methods of Learning Used and Reactions to Them
(By Number of Respondents)

	Have Used			Liked		
Methods of Learning	Male	Female	Total	Male	Female	Total
Correspondence Study	129	101	230	82	59	141
Educational TV	91	142	233	85	121	206
Video Cassettes	80	104	184	70	87	157
Tapes and/or Records	119	166	285	97	141	238
Supervised Independent Study	126	193	319	106	174	280
Study with a Tutor	62	74	136	51	64	115
Radio Study Centers	9	12	21	7	9	16

Information from Those Who Would Like to Participate

When asked if they would like to participate in educational, occupational training, or cultural activities in the near future, 704 of those interviewed (62.6 per cent) responded "yes" or "maybe;" 276 (24.5 per cent) stated "no;" and 140 (12.4 per cent) answered "don't know." Table 3-13 shows the responses for each of the sub-regions.

TABLE 3-13

Like to Participate in Educational, Occupational Training, or Cultural Activities
(By per cent of Respondents by Sub-region)

	1	2	3	4	5	6	7	8	9
Yes	46.0	36.7	56.5	39.2	46.0	27.6	62.9	47.4	57.1
Maybe	19.8	17.8	8.7	18.8	15.3	24.1	15.7	9.0	24.5
No	27.2	26.7	34.8	23.3	25.0	31.0	14.3	26.9	12.2
Don't Know	7.0	18.9	0	18.5	13.6	17.2	7.1	16.7	6.1

The persons who had responded "yes" or "maybe" to participating in educational, occupational training, or cultural activities were asked about the types of refresher courses they might need, college services that would be of value, the tuition costs, occupational areas of interest, and leisure time courses or activities of interest. Table 3-14 contains the number of responses for the refresher courses, with communications skills (324) and human relations skills (286) in greatest demand. This seems to indicate a concern for inter-relationships with others. Most of the listings under "other" were classes they wanted to take rather than refresher courses; however, types of refresher courses, with the number suggesting each in parentheses, were: writing skills (4), improve basic English (4), spelling (3), vocabulary expansion (2), and having a support group (2). All but the last one suggested relate closely to communications skills.

TABLE 3-14

Types of Refresher Courses Needed
(By Number of Persons Interested in Participating)

Type of Assistance	Male	Female	Total
Refresher Mathematics	82	165	247
Reading Improvement	74	141	215
Communication Skills	109	215	324
Human Relations Skills	100	186	286
English as a Second Language	26	34	60
GED or High School Completion	34	71	105
Other	29	72	101

For the services offered at South Seattle Community College that would be of value, the highest number of responses were for career information, women's programs, library services, and job placement services, with a higher per cent of females over males listing each. See Table 3-15. Within the public housing areas, financial assistance and job placement services were listed most often, again possibly reflecting the economic conditions of those areas.

TABLE 3-15

Services that Would Be of Value
(By Number of Persons Interested in Participating)

Services	Male	Female	Total
Counseling	62	111	173
Career Information	69	186	255
Transfer Information	24	51	75
Financial Assistance	53	153	206
Health	24	80	104
Student Activities	18	58	76
Library	70	172	242
Orientation to College	22	61	83
Academic Advisement	37	78	115
Tutoring	25	68	93
Job Placement	62	168	230
Testing	28	78	106
Minority Affairs	31	66	97
Women's Programs	15	236	251

The amount of tuition charged at the time, $9.60 per credit, was explained to the persons interested in participating in a program of educational, occupational training, or cultural activities, and that a five credit course meeting twice a week (for about six hours) for one quarter would cost $48. They were asked their reactions to this cost and whether or not they would pay it for a course that they wanted. The tuition charged was considered "about right" by 76.2 per cent of the persons interested in participating, "too high" by 20.0 per cent, and "too low" by 3.8 per cent. There were 88.9 per cent who stated "yes," that they would pay it for a course that they wanted, and 11.1 per cent who replied, "no." It appears that the tuition cost is of relatively low importance as a consideration for taking courses.

The respondents interested in an instructional program were asked to indicate from a list of the programs offered at South Seattle Community College any occupational areas in which they would like job preparatory or job upgrading training. Their responses, Table 3-16, show supervision and management in most demand (182 respondents), followed by general business (159), college transfer (145), accounting and finance (143), and landscape and environmental horticulture (127). These responses parallel the needs expressed by business and industry, with business administration and the supervision and management areas high. The programs or areas listed most often under "other" were nursing/medical (16 respondents), counseling/psychology (10), carpentry (10), computer processing (9), and engineering (8). Table 3-16 is set up by sex according to the instructional areas at SSCC. The total number responding for each instructional area is shown on the same line as the name of the area; i.e., aircraft has a total of 31 males and 27 females, for a total of 58 persons interested in preparatory training, 5 males and 3 females for 8 interested in upgrading training, making totals of 36 males and 30 females (66 persons) interested in aircraft training.

Shown a list of leisure-time courses and activities, the persons who wanted to participate were asked to check the ones they would like. Since nearly all the courses or activities could be offered on campus or at appropriate off-campus sites, the number of respondents for each is shown by the subregions in Table 3-17. Those receiving most checks were photography (252), home repair (232), gourmet cooking (218), and automotive maintenance (205). Listed under the "other" category were arts and crafts (31), cooking and sewing (13), vocational classes (12), fitness (10), foreign languages (9), personal growth (5), music (5), parenting/child development (5), and horticulture (4).

TABLE 3-16

Interest in Occupational Programs
(By Number of Persons Interested in Participating)

Occupational Area	Preparatory			Upgrading			Totals		
	M	F	T	M	F	T	M	F	T
AIRCRAFT	31	27	58	5	3	8	36	30	66
1. Airframe and Powerplant	10	8	18	1	2	3	11	10	21
2. Avionics Technology	13	8	21	2	1	3	15	9	24
3. Aviation Maintenance	8	11	19	2	0	2	10	11	21
MOTOR VEHICLE	99	91	190	63	14	77	162	105	167
4. Automotive Body	18	17	35	11	3	14	29	20	49
5. Automotive Mechanic	37	30	67	22	11	33	59	41	100
6. Auto Parts Counterman	5	10	15	5	0	5	10	10	20
7. Automotive Machinist	15	9	24	8	0	8	23	9	32
8. Diesel & Heavy Equipment Mechanic	9	10	19	10	0	10	19	10	29
9. Commercial Truck Driving	15	15	30	7	0	7	22	15	37
TECHNICAL EDUCATION	62	53	115	53	15	68	115	68	183
10. Industrial Technology	10	3	13	9	2	11	19	5	24
11. Industrial Engineering Technology	7	7	14	12	2	14	19	9	28
12. Industrial Drafting & Design Tech.	19	13	32	8	3	11	27	16	43
13. Mechanical Engineering Technology	9	6	15	8	2	10	17	8	25
14. Civil Engineering Technology	7	6	13	7	1	8	14	7	21
15. Bev. & Food Dispensing Equip. Tech.	3	12	15	4	4	8	7	16	23
16. Building Maintenance Technology	7	6	13	5	1	6	12	7	19
HORTICULTURE	38	114	152	14	31	45	52	145	197
17. Landscape & Environmental Hort.	30	63	93	12	22	34	42	85	127
18. Retail Floristry	8	51	59	2	9	11	10	60	70
HOSPITALITY AND FOOD SERVICE	19	93	112	12	24	36	31	117	148
19. Hospitality and Food Services	9	49	58	6	13	19	15	62	77
20. Hotel and Restaurant Management	10	44	54	6	11	17	16	55	71
BUSINESS AND OFFICE	68	199	267	55	116	171	123	315	438
21. Secretarial Science	4	37	41	1	20	21	5	57	62
22. Accounting and Finance	24	55	79	22	42	64	46	97	143
23. General Business	32	70	102	24	33	57	56	103	159
24. Word Processing	8	37	45	8	21	29	16	58	74
HOME AND FAMILY LIFE	15	126	141	11	63	74	26	189	215
25. Home Economics	8	65	73	6	31	37	14	96	110
26. Early Childhood Education	7	61	68	5	32	37	12	93	105
COLLEGE TRANSFER 27. College or University Courses	27	85	112	15	18	33	42	103	145
SUPERVISION AND MANAGEMENT 28. Supervision and Management	34	75	109	39	34	73	73	109	182
OTHER	24	58	82	16	23	39	40	81	121

TABLE 3-17

Courses and Activities of Interest
(By Number of Persons Interested in Each Sub-region)

	1	2	3	4	5	6	7	8	9	Total
1. Painting	53	12	1	50	30	5	15	8	7	181
2. Ceramics	49	15	3	49	30	8	10	17	10	191
3. Photography	66	21	6	70	35	7	15	22	10	252
4. Art Appreciation	25	5	1	27	14	5	7	5	6	95
5. Music Appreciation	31	12	1	30	17	3	11	8	8	121
6. Ethnic Programs	11	5	0	29	5	4	14	10	4	82
7. Group Singing	16	4	0	23	9	3	14	9	4	82
8. Contemporary Drama	21	5	1	17	7	4	8	3	3	69
9. Dance/Exercise	60	20	4	52	32	7	17	10	7	209
10. Creative Writing	38	11	3	35	24	2	12	8	9	142
11. Furniture Making	55	13	2	44	39	8	12	16	9	198
12. Home Repair	63	22	2	75	34	5	6	14	11	232
13. Automotive Maintenance	60	18	1	59	25	4	15	12	11	205
14. Women's Programs	37	18	2	36	26	6	26	29	14	194
15. Self Defense	45	13	1	48	28	8	25	17	15	200
16. Interior Design	51	13	4	50	30	8	11	11	6	184
17. Landscape Design	49	13	3	35	16	6	10	5	4	141
18. Fabric & Apparel Design	37	9	3	39	8	13	13	22	7	151
19. A Lecture Series	34	7	1	19	12	4	8	4	1	90
20. Consumer Interest Topics	31	11	2	36	7	4	13	9	13	126
21. Technical Report Writing	9	3	2	20	32	2	2	2	1	73
22. Gourmet Cooking	76	16	4	54	15	7	18	15	13	218
23. Other	56	3	0	33	15	2	8	1	3	121

Summary

1. There were 1,127 households contacted with 459 males and 668 females being interviewed, over half of whom had lived in the area ten years or longer. Nearly one-fourth (23.6 per cent) have not completed high school, 25.3 per cent are high school graduates, 26.3 per cent have attended a community college, and 17 per cent have completed a four-year college program or more.

2. Of the 1,127 persons interviewed, 592 were employed with 39.5 per cent of them having been with the same employer for over five years, and 45.9 per cent being very satisfied with their jobs. Specialized training was needed by 348 to get their present jobs, with 49.1 per cent of those receiving it on the job, 10.3 per cent at a community college, and 10.6 per cent at a vocational-technical school. Two hundred seventeen of the 592 employed reported they could go further in their present line of work with training, and 324 stated that the employers support employees continuing their occupational education or training.

3. The purposes for participating in educational, occupational training, or cultural activities that the respondents listed most often were "to learn something of general interest to become better informed," and "to learn something to use in my spare time." The respondents prefer classes at a community college or a nearby elementary or high school, with Monday through Thursday evenings being preferred. The major concerns were having to pay tuition (yet 88.9 per cent of those interested said they would pay it for a class they wanted), having transportation furnished, and receiving a certificate.

4. Seven hundred four (62.6 per cent) respondents would like to participate in educational, occupational training, or cultural activities in the near future. The types of refresher courses needed most were those designed to improve communications and human relations skills. The college services of most interest were career information, women's programs, library, job placement, financial, and counseling. The cost of tuition was considered appropriate by 76.2 per cent of those interested in participating, and 88.9 per cent said they would pay it for a class or activity they wanted.

5. The programs of most interest to the persons who would like to participate in the near future were supervision and management, general business, college transfer, and accounting. The most popular special interest courses were photography, gourmet cooking, home repair, and automobile maintenance.

Note: All of the survey data was reviewed in relationship to the responses from each of the nine sub-regions, and their specific responses were mentioned whenever they were in variance with those for the total area.

Conclusions

1. Considering that out of 592 employed, 348 needed specialized training to get their present jobs, 217 could go further in their present line of work with training, 424 stated their purpose for further education or training would be to learn how to do their jobs better, and 324 reported that employers support further training for their employees, it would seem there is an excellent opportunity for the community college to work closely with both employers and employees to help serve their joint and individual needs.

2. Based upon the academic level completed by the persons interviewed (23.6 per cent having not completed high school, and 25.3 per cent being high school graduates), it would seem there is a potential 48.9 per cent or more of the residential population that could be served by community college programs. About half of these potential students would be eligible for college transfer and occupational programs; the other half could benefit from high school completion or developmental programs.

3. Seven hundred four (62.6 per cent) of the people interviewed were interested in educational, occupational training, or cultural activities; 324 expressed a need for communications skills; 286 for human relations skills; 255 an interest in career information; 251 in women's programs; 242 in library, and 230 in job placement services. It appears that workshops or special interest classes covering these areas would be in great demand as well as a worthwhile service to the community.

4. Students and visitors new to the college often complain that they did not know the institution existed. Considering that 38.5 per cent of all respondents stated they had visited or attended classes at South Seattle Community College, it appears evident the lack of visibility of the college with the community has been greatly reduced, if not entirely eliminated.

5. There has been an assumption that students would prefer to attend classes on a college campus rather than at outreach locations, probably because of the collegiate atmosphere. Results of this study suggest that proximity to home is an equally important consideration, since 39.8 per cent of the respondents stated they would prefer classes on the college campus and 39.9 per cent chose a local elementary or secondary school.

CHAPTER IV: SOUTH SEATTLE COMMUNITY COLLEGE STUDENTS

A survey of the South Seattle Community College students was conducted winter quarter, 1979, to learn about their backgrounds, considerations in selecting a school, reactions to the programs and services at South Seattle Community College, and their plans for the future.

Procedure

The students were surveyed in classroom groups with all of the vocational programs and the 9 a.m. and 11 a.m. college transfer classes being done on the same day. The college transfer classes also were done the following day to include the classes not meeting on a daily basis. Evening classes were surveyed on two consecutive nights. The specific coverage for each division was planned with the chairperson, the instructors were alerted in advance, and the survey was scheduled to cause minimum interference with the instructional program. The survey instrument was developed, reviewed by the South Seattle Community College deans and division chairpersons, and revised to be most effective. A copy of the instrument is in Appendix C-1. The surveys were conducted by South Seattle Community College students, faculty, and staff who had been trained for this purpose.

Characteristics of the Respondents

Responses were received from 1,182 students, 840 day and 342 evening, representing 20.7 per cent of the day students and 12.9 per cent of the evening students enrolled winter quarter, 1979. Responses in Table 4-1 are set up by instructional division to show the enrollment by headcount, the responses received classified by sex and by day or evening student categories, and the per cent the responses were of the enrollment total in each division.

TABLE 4-1

Comparison of Responses Received to Headcount Enrollment

Division	Headcount* Wtr. 1979	Responses Received									Percent of Enrollment
		Day			Evening			Totals			
		M	F	T	M	F	T	M	F	T	
Aviation Maintenance	324	165	6	171	0	0	0	165	6	171	52.8
Motor Vechicle Maintenance	676	216	12	228	3	1	4	219	13	232	34.3
Technical Education	243	44	13	57	9	4	13	53	17	70	28.8
Horticulture	180	13	23	36	5	2	7	18	25	43	23.9
Hospitality and Food Sciences	150	16	19	35	0	2	2	16	21	37	24.7
Business and Office	215	19	79	98	10	29	39	29	108	137	63.7
Home and Family Life	681	2	9	11	0	0	0	2	9	11	1.6
College Transfer	640	57	70	127	28	36	64	85	106	191	29.8
Supervision and Management	205	2	1	3	68	67	135	70	68	138	67.3
Other	-	15	13	28	6	34	40	21	47	68	-
No Division Checked	-	25	21	46	13	25	38	38	46	84	-
Total Responses Received		574	266	840	142	200	342	716	466	1182	

*Student Personnel Services enrollment report for Winter Quarter, 1979 - March 26, 1979.

Since the home and family life programs are community oriented with the adult participants meeting together once a month, it was only possible to include the on-campus model program in the survey, thus the low rate of response for that division.

The nature of the study provided a sample that is not representative of the entire college in all the areas of coverage. For example, some students attended several classes together each day; others attended all classes individually. Thus, a comparative coverage was not achieved for individual programs. Also, some of the instructional areas; i.e., apprenticeship, industrial first aid, and occupational teacher education, were not included in the survey. Therefore, to provide the most useable base, some of the information obtained is set up on a college-wide basis showing a day and evening breakdown, and some is on a divisional basis. Home and family life is not included because of the low coverage of that division.

The amount of work completed by the respondents toward a certificate or degree is shown by instructional division in Table 4-2. Each box contains two numbers, the upper left being the number of respondents in that category, and the lower right being the percent it is of the total number of respondents. For example, aviation maintenance had 101 respondents who were classified as first year (completed 44 credit hours or less), making up 59.1 per cent of its students that responded. The students enrolled in occupational certificate programs are included with the first year group.

TABLE 4-2

Amount of Work Completed Toward a Certificate or Degree
(By number and per cent of respondents)

Division	1st Year	2nd Year	Total
Aviation Maintenance	101 59.1	70 40.9	171
Motor Vehicle Maintenance	132 56.9	100 43.1	232
Technical Education	48 68.6	22 31.4	70
Horticulture	26 60.5	17 39.5	43
Hospitality and Food Sciences	27 73.0	10 27.0	37
Business and Office	102 74.5	35 25.5	137
College Transfer	127 66.5	64 33.5	191
Supervision and Management	108 78.3	30 21.7	138

The basis of enrollment (full-time or part-time) of the respondents is shown in Table 4-3, again on a divisional basis with both the number of students and the per cent each group is of the total.

TABLE 4-3

Basis of Enrollment
(By number and per cent of respondents)

Division	Full Time		Part Time		Total
Aviation Maintenance	159	93.0	12	7.0	171
Motor Vehicle Maintenance	223	96.1	9	3.9	232
Technical Education	56	80.0	14	20.0	70
Horticulture	35	81.4	8	18.6	43
Hospitality and Food Sciences	35	94.6	2	5.4	37
Business and Office	78	56.9	59	43.1	137
College Transfer	136	71.2	55	28.8	191
Supervision and Management	11	8.0	127	92.0	138

The age of the students at the time of enrollment for winter quarter, 1979, is shown in Table 4-4. These figures are from the Student Personnel Services enrollment report for the entire college as figures were not available by individual division.

TABLE 4-4

Age at Time of Enrollment*
(Per cent of total enrollment

Age	Male	Female	Total
Under 18	0.6	0.5	0.6
18 - 21	11.9	9.9	11.2
22 - 24	14.5	10.1	13.0
25 - 29	21.3	19.6	20.7
30 - 39	23.5	25.7	24.2
40 - 49	10.4	12.8	11.2
50 - 59	9.7	10.2	9.9
60 and over	3.1	3.1	3.1
Not indicated	5.0	8.1	6.1

*Based upon Student Personnel Services enrollment report for winter quarter, 1979. March 26, 1979.

Over one-third, 33.9 per cent, of the respondents were from high schools within the immediate service area of South Seattle Community College; 22.3 per cent were from Puget Sound area high schools; 9.1 per cent from other areas in the state; and 31.1 per cent from outside Washington. This information listing the number of students from each of the high schools in the immediate service area is contained in Appendix C-2.

About an equal number of the students reported their high school curriculum as college preparatory, 26.5 per cent, and general (defined as other than vocational or college preparatory), 27.2 per cent. Business and office followed with 11.2 per cent, and industrial arts had 9.4 per cent. The number of students from each of the high school curriculums is shown on a divisional basis in Table 4-5.

TABLE 4-5

High School Curriculum
(By number of respondents for each division)

Division	General	College Prep.	Ind. Arts	Trades	Business and Office	Distributive Education	Health	Homemaking	Agriculture	Other	No Response	Totals
Aviation	46	42	34	19	3	5	-	1	-	14	7	171
Motor Vehicle	58	41	45	38	5	10	1	2	1	25	6	232
Technical Educ.	23	17	9	2	2	6	2	1	2	4	1	70
Horticulture	11	15	3	0	1	0	0	0	7	4	2	43
Hospitality	11	10	0	1	5	1	1	3	0	5	0	37
Bus. & Office	35	30	2	1	50	5	0	2	0	7	5	137
College Transfer	61	73	5	1	20	9	2	3	1	13	3	191
Supv. & Mgmt.	38	42	4	8	28	4	0	1	2	8	3	138

The largest number of students responding considered themselves in the middle third of their high school graduating class, followed by the top third, and then by the lower third. Table 4-6 has this information on a divisional basis.

TABLE 4-6

Rank in High School Graduating Class
(By number of respondents for each division)

	Rank in Class						
Division	Top Third	Mid-Third	Low Third	GED	Not Grad.	No Resp.	Total
Aviation	50	89	14	12	5	1	171
Motor Vehicle	39	122	29	20	15	7	232
Tech. Educ.	24	26	7	7	4	6	70
Horticulture	17	17	3	2	2	2	43
Hospitality	13	10	5	4	3	2	37
Bus. & Office	40	56	10	15	13	3	137
Coll. Transfer	78	79	16	7	5	6	191
Supv. & Mgmt.	41	59	22	12	4	0	138

Plans for the Future

Over two-thirds of the students responding stated that they planned to complete a degree or certificate program at South Seattle Community College. The per cent for each division is shown in Table 4-7.

TABLE 4-7

Plans to Complete a Program at SSCC
(By per cent of respondents for each division)

Division	Yes	No	Don't Know
Aviation Maintenance	84.7	4.2	11.1
Motor Vehicle Maintenance	90.5	3.9	5.6
Technical Education	80.6	13.4	6.0
Horticulture	82.9	9.8	7.3
Hospitality and Food Sciences	74.3	8.6	17.1
Business and Office	57.6	20.4	22.0
College Transfer	55.4	24.5	20.1
Supervision and Management	61.2	15.7	23.1

When asked the highest level of education or training they planned to complete within the next ten years, the day students were nearly equally divided between an associate degree, an occupational certificate, and a bachelor's degree with responses ranging from 22 to 25 per cent. The evening students had the bachelor's degree the most common goal with 32.2 per cent, followed by the associate degree with 23.1 per cent, and the master's degree with 13.7 per cent. Table 4-8 contains this information by number of students for each of the instructional divisions. The only divisions with a decidedly larger number showing the same educational goal were college transfer with the bachelor's degree, and motor vehicle maintenance with the occupational certificate.

TABLE 4-8

Highest Level of Education or Training Planned
(By number of respondents for each division)

	Level of Education or Training						
Division	GED/ H.S.	Occup. Cert.	Assoc. Degree	B.A.	M.A.	Doct.	Other
Aviation	2	37	40	51	11	3	18
Motor Vehicle	4	94	74	20	9	3	20
Technical Educ.	0	6	26	25	5	3	3
Horticulture	0	7	12	11	4	0	7
Hospitality	2	15	8	4	5	0	1
Business & Office	5	31	36	28	11	2	14
College Transfer	0	1	16	75	55	21	16
Supv. & Mgmt.	1	9	51	43	16	2	11

The year after completing their work at SSCC, 44.6 per cent of the day students and 42.1 per cent of the evening think they will be working full-time, while 19.9 per cent of the day and 23.4 per cent of the evening plan to transfer to a four-year college. The plans for the students in each of the instructional divisions are shown in Table 4-9.

TABLE 4-9

What Students Will Do First Year After Completion at SSCC
(By number of respondents for each division)

	Activity								
Division	Trans. to 4 Yr.	Another Trade School	Mili-tary	Work F.T.	Work P.T.	Have Own Bus.	Home-maker	Tra-vel	Other or Comb.
Aviation	20	4	1	89	2	12	0	0	35
Motor Vehicle	16	15	1	176	6	13	0	3	31
Tech. Educ.	12	3	1	33	2	4	0	2	11
Horticulture	5	0	0	13	4	8	0	3	9
Hospitality	2	1	0	18	0	2	0	2	9
Bus. & Office	27	6	1	64	12	5	1	4	17
Coll. Transfer	129	7	1	12	2	2	1	4	26
Supv. & Mgmt.	21	4	0	62	0	4	0	0	43

There were 63.8 per cent of the day students and 83.2 per cent of the evening students employed, with 24.3 per cent of the day and 76.8 per cent of the evening students working 30 or more hours per week. Table 4-10 shows the number of respondents that are employed, and the number of hours they work per week by instructional division.

TABLE 4-10

Number of Hours Employed Per Week
(By number of respondents in each division)

	Day			Evening			Total		
Division	Less 20	20-29	30 or More	Less 20	20-29	30 or More	Less 20	20-29	30 or More
Aviation	23	33	75	0	0	0	23	33	75
Motor Vehicle	49	68	52	0	0	3	49	68	55
Tech. Educ.	9	12	5	0	0	6	9	12	11
Horticulture	13	9	3	1	1	2	14	10	5
Hospitality	10	4	6	0	0	2	10	4	8
Bus. & Office	17	15	17	2	2	28	19	17	45
Coll. Transfer	29	21	26	3	3	54	32	24	80
Supv. & Mgmt.	0	0	2	0	2	130	0	2	132

Written materials, i.e., catalogs, brochures, were the most common source of information about SSCC for both day and evening students. Table 4-11 also indicates that word-of-mouth is an important source of information as "friends or relatives" was second, for both day and evening students. Under "other" were varying combinations of the sources listed, with no one combination predominate.

TABLE 4-11

Source of Information About South Seattle Community College
(By per cent of respondents)

	Day Students			Evening Students			Total Students		
Source of Information	M	F	T	M	F	T	M	F	T
Other high school students	1.9	1.8	1.9	1.3	0.0	0.6	1.8	1.1	1.5
H.S. teachers or counselors	11.5	2.6	8.6	3.3	3.6	3.5	9.8	3.0	7.1
Friends or relatives	23.7	22.6	23.3	14.7	12.5	13.5	21.8	18.5	20.5
Written materials about SSCC	33.0	50.0	38.6	47.3	55.2	51.8	36.0	52.2	42.4
Employer or persons I work with	3.0	2.2	2.7	16.0	10.9	13.2	5.7	5.8	5.8
Representatives of SSCC	5.1	5.1	5.1	2.0	3.6	2.9	4.5	4.5	4.5
SSCC students	5.8	4.4	5.4	4.0	4.2	4.1	5.5	4.3	5.0
Other sources	15.0	10.9	13.7	10.7	8.3	9.4	14.1	9.9	12.4

The most important reason for pursuing an education beyond high school was "to enter an occupation requiring technical skills and/or associate degree" for the day students, and "to obtain skills necessary for advancement in my present job" by the evening students. For both groups, the next most important reasons were, "desire a broader cultural-educational background" and "to enter an occupation requiring a bachelor's or higher degree." It would seem from these responses that the day and evening students have similar objectives, with the day students relating them to preparing to enter an occupation and the evening students relating them to advancing in the occupational area they are already in.

The most important reason for enrolling at South Seattle Community College, according to both the day and evening students responding was, "offered courses that I wanted." "College classes conveniently located" was second, and "low cost" next in importance. The students' reasons are shown by instructional division in Table 4-12.

TABLE 4-12

Most Important Reason for Enrolling at SSCC
(By number of respondents per division)

Division	Low Cost	Convenient Location	Offered Courses I Wanted	Denied Admission to Another School	Had Difficulties in Another School	Heard College Good	Advice of Others	Could Live at Home	Other
Aviation Maintenance	42	46	19	0	3	26	15	26	1
Motor Vehicle Maintenance	82	57	184	2	1	82	23	35	0
Technical Education	14	25	44	2	2	9	9	7	0
Horticulture	7	8	32	0	1	7	2	1	1
Hospitality & Food Sciences	8	13	24	0	1	9	1	3	0
Business and Office	14	61	46	0	1	10	1	9	4
College Transfer	45	109	30	5	7	12	11	24	6
Supervision and Management	5	30	51	0	0	5	3	1	4

In response to the question of whether or not they would enroll at South Seattle Community College if they were making the choice again, 81.8 per cent stated "yes," 7.5 per cent stated "no," and 9.8 per cent stated "don't know." Table 4-13 shows the responses for each instructional division. These responses can be interpreted to indicate a high degree of satisfaction on the part of the students in regard to the work they have been doing at South Seattle Community College.

TABLE 4-13

Would Students Enroll at SSCC Again
(By per cent within each division)

Division	Yes	No	Don't Know
Aviation Maintenance	73.6	12.3	14.1
Motor Vehicle Maintenance	82.7	7.1	10.2
Technical Education	80.6	14.9	4.5
Horticulture	82.9	9.8	7.3
Hospitality and Food Sciences	80.0	8.6	11.4
Business and Office	89.4	3.8	6.8
College Transfer	78.9	9.2	11.9
Supervision and Management	89.8	3.6	6.6

The students who stated they would not enroll at South Seattle Community College if making the choice again, were asked for their reasons. Their responses, shown by division in Table 4-14, indicate that limited course offerings, lack of college atmosphere and lack of student activities are the main reasons.

TABLE 4-14

Reason Why Students Would Not Enroll at SSCC Again
(By number of respondents per division)

Division	Lack of Interest by Faculty	Lack of Student Activities	Limited Offerings	Grading System	Lack of College Atmosphere	Difficulty of Courses	Lack of Direction	Assistance Not Available	Lack of Funds	Other
Aviation Maintenance	6	8	9	3	7	3	6	5	3	0
Motor Vehicle Maintenance	12	6	3	8	7	2	6	11	2	1
Technical Education	0	3	8	0	3	1	0	1	2	1
Horticulture	1	2	1	0	4	1	2	2	1	1
Hospitality & Food Sciences	1	0	1	1	0	0	1	1	0	1
Business and Office	0	1	5	1	3	0	1	1	0	0
College Transfer	1	2	22	2	7	1	0	0	1	3
Supervision and Management	1	1	2	0	1	0	0	1	0	3

The students were asked to classify their parents' occupations, their own present jobs, and their career goals into one of twelve job categories. Their fathers were classified as semi-skilled or skilled workers by 22.1 per cent of all the students responding; professional II (defined as a teacher, engineer, accountant) by 13.3 per cent; and managerial, supervisory or executive by 12.4 per cent. The most commonly listed occupations for the mothers were homemaker, 31.6 per cent; sales or clerical, 14.1 per cent; and professional II, 7.1 per cent. Sales or clerical jobs for the mothers may reflect the type of jobs most accessible to women with little or a relatively short period of training. Appendix C-3 shows the responses about the parents' occupations.

The students' present job categories and career goals are shown in Table 4-15. To provide more meaningful data, the twelve job categories have been grouped into professional-managerial, non-professional-managerial, and other, as shown in the table. There was a higher per cent of the evening students than day students with a professional-managerial job career goal (79.2 per cent to 66.7 per cent), while a larger per cent of the day students had a non-professional-managerial job career goal (19.6 to 7). As would be expected, a larger portion of the evening students have jobs in the professional-managerial group, while a larger portion of the day students' jobs are in non-professional-managerial.

TABLE 4-15

Students' Present Jobs and Career Goals
(By per cent of respondents)

	Day		Evening	
PROFESSIONAL-MANAGERIAL	Present Job	Career Goal	Present Job	Career Goal
Professional I	0.6	7.5	0.6	7.3
Professional II	3.1	21.9	7.0	21.4
Managerial, Supervisory or Executive	2.6	10.5	19.9	40.8
Semi-professional or Technical	5.1	13.0	18.5	5.9
Owner of a business or farm	1.8	13.8	0.6	3.8
Total	13.2	66.7	46.6	79.2
NON-PROFESSIONAL-MANAGERIAL				
Sales or clerical	8.7	3.3	17.3	4.4
Semi-skilled or skilled worker	24.2	15.5	12.6	2.3
Unskilled worker or general laborer	13.8	0.0	4.4	0.3
Homemaker, full-time	1.7	0.8	0.3	0.0
Total	58.4	19.6	34.6	7.0
OTHER				
Retired	1.0	0.7	0.6	0.9
Unemployed	6.9	0.4	1.2	0.0
Other	1.4	1.8	0.6	0.9
Total	9.3	2.9	2.4	1.8

Over 60 per cent of the students responding thought the availability of training and educational opportunities beyond high school in the Puget Sound area was adequate, 29.1 per cent thought it was fair, and 5.3 per cent thought it was poor.

The students were asked to evaluate how well the course of study was preparing them for what they plan to do upon its completion. Table 4-16 shows their responses by instructional division. To provide more meaningful information, the categories of "just what I need" and "good in most ways" are grouped together under "satisfactory;" and the categories of "fair, could be better" and "not very well" under "unsatisfactory." For example, aviation maintenance had 25.2 per cent "just what I need" and 46.0 per cent combined to make 71.2 per cent as "satisfactory." These figures indicate a high degree of satisfaction, from 71.2 per cent to 94.9 per cent, with the programs offered.

TABLE 4-16

How Well Students Are Being Prepared
(By per cent responding in each division)

	Satisfactory			Unsatisfactory		
Division	Just What I Need	Good In Most Ways	Totals	Fair, Could Be Better	Not Very Well	Totals
Aviation	25.2	46.0	71.2	23.9	4.9	28.8
Motor Vehicle	30.3	49.6	79.9	15.6	4.5	20.1
Tech. Educ.	40.0	37.2	77.2	15.7	7.1	22.8
Horticulture	41.0	53.9	94.9	5.1	0.0	5.1
Hospitality	54.3	37.1	91.4	8.6	0.0	8.6
Bus. & Office	53.4	37.4	90.8	6.9	2.3	9.2
College Trans.	35.0	44.3	79.3	16.9	3.8	20.7
Supv. & Mgmt.	39.4	49.6	89.0	8.0	3.0	11.0

The responses grouped into "unsatisfactory" in Table 4-16, ranging from 5.1 per cent to 28.8 per cent in the divisions, indicate a need for analysis. Therefore, the students responding "not very well," "fair, but could be better," and also "good in most ways" were asked how South Seattle Community College could prepare them better. Students in each of the instructional divisions stressed a need for better counseling and advising, better quality of instruction, and more courses or a re-evaluation of present ones. In addition, the students from aviation and motor vehicle maintenance stated a need for better equipment and training aids. These two divisions and horticulture wanted more practical experience. The technical education and business and office students wanted a greater variety of classes; and, along with students from supervision and management, more courses transferable to a four-year institution. Students in hospitality and food sciences wanted more classroom instruction, demonstrations and discussion. The college transfer students strongly emphasized the need for more course offerings.

From their contacts with other students, the respondents were asked to identify the likelihood of persons enrolling at South Seattle Community College based on nine variables, into categories of "high," identified by H; "average," by A; and "not likely," by N. Table 4-17 shows their responses. These responses seem to indicate an appreciation for the occupational level of training at South Seattle Community College, and a respect for the quality of the programs.

TABLE 4-17

Kinds of Persons Likely to Enroll at SSCC
(By per cent of respondents)

	Day			Evening			Totals		
	H	A	N	H	A	N	H	A	N
Persons who can't finance going somewhere else	30.1	44.5	14.4	23.7	35.4	17.5	28.3	41.9	15.3
Students with below average high school grades	16.3	51.2	20.9	9.6	42.4	23.1	14.4	48.7	21.6
Persons who want a technical/ semi-professional career	63.7	24.6	2.9	55.0	23.4	1.2	61.3	24.3	2.4
People who "flunk out" elsewhere or can't get into another college	10.0	32.8	44.7	7.6	24.9	41.8	9.3	30.5	43.9
Persons who want a good educ.	34.8	48.2	6.3	34.5	40.6	3.8	34.8	46.0	5.6
Students whose high school grades were average or higher	22.9	56.7	8.8	21.1	49.7	4.4	22.4	54.7	7.5
Persons with no financial difficulties	12.5	50.9	24.1	10.5	46.2	18.7	11.9	49.6	22.6
Persons with job and/or family responsibilities	39.1	45.7	4.9	52.3	25.1	1.5	43.0	39.8	3.9
Persons who have been away from school for several years	41.5	42.6	5.8	52.9	24.9	1.8	44.8	37.5	4.7

From a list of possible reasons, the students were asked to select those that may have influenced some of their friends or high school classmates not to enroll at South Seattle Community College, weighing the influence as "much," "some," or "none," identified in Table 4-18 as "M," "S," or "N." A comparison of the reasons in all three categories indicates the advice of high school teachers and counselors was not an influencing factor for the students enrolling at South Seattle Community College; i.e., those reasons were checked least often under the "much" and "some" categories, and most often under the "none" category.

TABLE 4-18

Why More of Your Friends or H. S. Classmates Did Not Enroll at SSCC
(By per cent of respondents)

	Day			Evening			Totals		
	M	S	N	M	S	N	M	S	N
Lack of money	8.9	34.5	41.1	5.3	27.8	38.0	7.9	32.6	40.3
Wanted better college	19.1	44.7	20.2	11.4	36.8	21.1	16.9	42.5	20.5
Wanted to live away from home	13.1	40.0	30.6	9.6	26.9	31.0	12.1	36.2	30.7
Had little or no information about the college	25.9	38.4	20.3	12.6	34.2	21.1	22.1	37.2	20.6
Advice of high school counselors not to enroll	4.3	16.3	60.5	3.2	11.7	49.7	4.0	15.0	57.5
Advice of high school teachers not to enroll	3.6	13.1	64.2	2.6	12.0	49.7	3.3	12.8	60.1
Program wanted not offered at SSCC	19.1	46.6	18.0	11.4	40.9	17.0	16.9	45.0	17.7
Lack of transportation	9.9	36.9	36.6	4.7	31.9	30.4	8.4	35.5	34.9
Had no interest in further education	17.2	49.9	16.8	13.7	42.1	12.6	16.2	47.7	15.6
Too much like high school	6.7	31.5	44.4	3.2	26.6	34.8	5.7	30.1	41.6

The services offered by South Seattle Community College were listed and the students asked to identify those they were familiar with, those they had used, and the amount of help they had received. (See Table 4-19.) Although the directions were explicit, it is believed the layout of the survey form may have caused some of the respondents to overlook the "have used" columns, as in some cases the per cent rating the amount of help received from a service was higher than the per cent stating they had used the service. Also, some of the respondents may have checked "none" to indicate they had not used a service. Therefore, Table 4-19 shows the number of respondents rather than per cent of respondents; and the responses for "have used" and "amount of help received" are included as they provide general information relative to each service. The responses indicate the greatest usage by the students of library materials, counseling services, financial assistance, transfer information, and career information. The amount of help received seemed to parallel the amount of use made, with library materials, counseling services, financial assistance, and transfer information all rating high. This information for each instructional division is in appendices C-4 through C-11.

TABLE 4-19

Student Information About Services at SSCC
(By number of respondents)

	Know About		Have Used		Amount of Help Received					
					Day Students			Eve. Students		
	Day	Evening	Day	Evening	M	S	N	M	S	N
Counseling Services	627	211	389	105	104	287	227	31	84	89
Career Information	517	176	202	52	67	192	305	12	49	125
Transfer Information	501	166	171	56	63	143	356	18	42	121
Financial Assistance	580	151	236	30	126	118	335	14	27	132
Health Services	244	79	31	6	11	50	458	4	10	149
Student Activities	509	137	192	21	51	170	335	7	22	137
Library Materials (related to class work)	600	181	434	77	165	286	174	39	43	102
Orientation to College	330	105	123	16	30	120	381	7	23	133
Academic Advisement	373	124	143	38	44	118	371	11	29	125
Tutoring Services	415	108	73	7	27	72	427	6	8	146
Job Placement Services	381	111	75	7	33	79	411	4	10	145
Testing Services	281	108	63	15	15	66	436	11	11	141
Minority Affairs Assist.	318	112	25	6	17	36	462	3	12	145
Office of Women's Prog.	321	111	52	16	23	56	447	8	16	140

There were 20.6 per cent of the respondents who stated they were more interested in another program of study that was not offered at South Seattle Community College. Many listed programs already being offered, while others requested additional or related courses. The two listed most were computer science by 17 respondents, and sports related areas by 9. When asked if they would like to study non-credit a topic of special interest, 24.5 per cent responded that they would. The topics suggested most were sports activities by 11, and arts and crafts by 9.

Only 18.4 per cent thought some types of educational-cultural services or activities should be available to adults, while 20.0 per cent didn't think they should, and 55.9 per cent didn't know. Those suggested were workshops and forums by 40; gym facilities, 26; student body activities, 17; and personal development, 12. The responses to the above questions indicate an interest by the students in physical education; i.e., sports related, sports activities, and gym facilities: also an interest in workshops and forums.

Over 80 per cent of the students included in this survey get to their classes by automobile; 70.6 per cent in separate vehicles and 13.4 per cent in carpools or with a friend; while 8.9 per cent arrive by Metro bus. Most of them, 70.9 per cent, reported their classes were located within 30 minutes from where they start their trip to class. For example, a person who lives in Everett, but works in Seattle and goes to class directly from work, may be within a few minutes of class even though his residence is a much longer distance away. The length of time to get to class probably would be considerably longer if the occupational teacher education, and apprenticeship programs had been included in the survey.

Summary

1. Of the 1,182 students included in the survey, 716 were males and 466 females; and 840 were day students and 342 evening students.

2. There were 27.2 per cent from a general high school curriculum, 26.5 per cent from college preparatory, and 11.2 per cent from business and office, the largest of the subject matter areas. One-third of the students responding were from high schools within the SSCC service area, 22.3 per cent from the Puget Sound area, 9.1 per cent from other areas in the state, and 31.1 per cent from outside Washington. The largest portion came from the middle third of their high school graduating class, followed by the top third, and then the lower third.

3. Over two-thirds plan to complete a degree or certificate program at South Seattle Community College. For the highest level of education or training they hope to achieve within the next ten years, the day students were nearly equally divided between an associate degree, an occupational certificate, and a bachelor's degree. The most common goal for the evening students was the bachelor's degree, followed by the associate degree, and then the master's degree.

4. The year after completing their work at SSCC, 42.1 per cent anticipate working full time, and about 21 per cent transferring to a four-year school.

5. There were 63.8 per cent of the day students and 83.2 per cent of the evening students employed, with 24.3 per cent of the day and 76.8 per cent of the evening working over 30 hours a week.

6. The most common reason for pursuing education beyond high school for the day students was to enter an occupation requiring technical skills and/or an associate degree, and for the evening students to gain skills for job advancement. They came to SSCC because it offered courses they wanted; the classes were conveniently located; and the cost was low. Their major source of information was through written materials about SSCC and from friends or relatives.

7. A high degree of satisfaction with the SSCC programs was indicated as 81.8 per cent said they would enroll again, 9.8 per cent didn't know, and 7.5 per cent replied no. The reasons for those that would not enroll again were limited course offerings, lack of a college atmosphere, and lack of student activities.

8. The occupational categories of the students' fathers were 22.1 per cent semi-skilled or skilled, 13.3 per cent professional II (i.e., teacher, engineer, accountant), and 12.4 per cent managerial. Their mothers' occupations were homemakers, 31.6 per cent; sales or clerical, 14.1 per cent; and professional II, 7.1 per cent. More of the evening students than day students had a professional-managerial job career goal, while a larger per cent of the day students had a non-professional-managerial job career goal.

9. Over 60 per cent of the students responding thought there were adequate training and educational opportunities available, and from 71.2 per cent to 94.9 per cent in the different divisions evaluated the preparation they were receiving as just what they needed or good in most ways. The major suggestions for improvement were to provide more and better equipment, better counseling and advising, better quality of instruction, and to offer a wider variety of courses.

10. The students though the kinds of persons most likely to enroll at SSCC were those wanting a technical/semi-professional career, who had been away from school for several years, who have job and/or family responsibilities, and who want a good education. They stated the reasons that some of their friends did not enroll at SSCC were having little or no information about the college, and the programs they wanted were not being offered.

11. The services at SSCC that were best known and used most were counseling, library, career information, financial assistance, transfer information; and these same services had higher percentages of the students rating the help received as "much" more than the other services did.

12. One-fifth of the students were more interested in another program of study not offered at SSCC, with computer science and sports related listed most often. Nearly one-fourth were interested in a non-credit topic of special interest, listing sports activities, and arts and crafts most often. There were 18.4 per cent that thought educational-cultural services or activities should be available for adults, and the suggestions made most often were workshops and forums, gym facilities, student body activities, and personal development.

Conclusions

1. With 71.2 per cent to 94.9 per cent of the respondents rating their divisional programs as satisfactory, and 81.8 per cent stating they would re-enroll, it seems that the students at South Seattle Community College are well satisfied with the curriculum and instruction that are being offered.

2. The students attending South Seattle Community College seem to come for a specific purpose and are not greatly interested in cultural or avocational programs or student activities.

3. Since the major reasons of the respondents for pursuing an education beyond high school were to obtain the skills to enter and advance in an occupation and to gain a broader cultural-educational background, there appears to be a need for more general education, including some business management, in the occupational curriculum.

4. With over two-thirds of the students planning to complete a degree or certificate program at South Seattle Community College, and 21 per cent planning to transfer to a four-year school upon completion of their work, it would seem that more attention needs to be given to an articulation of the community college classes with those of the four-year schools.

CHAPTER V: HIGH SCHOOL SENIORS

A survey of the 1979 high school seniors was conducted to learn about their backgrounds, interests, and plans for the future. It included one private and ten public high schools in the general area from which South Seattle Community College enrolls most of its students. These are:

Cleveland High School	Seattle School District
Franklin High School	Seattle School District
Rainier Beach High School	Seattle School District
Project Interchange	Seattle School District
West Seattle High School	Seattle School District
Chief Sealth High School	Seattle School District
Foster High School	South Central School District
Kennedy High School	Archdiocese of Seattle
Evergreen High School	Highline School District
Glacier High School	Highline School District
Vashon High School	Vashon Island School District

Since four of the schools are in the geographic area assigned to Highline Community College, permission to include these schools in the survey was obtained from that community college.

Procedure

Each school district was mailed a letter informing it about the survey and requesting its participation. This was followed by a personal visitation to explain the survey, refine the survey instrument, and develop a procedure for administering it. Much of the work in developing and administering the survey form was done by South Seattle Community College students who enrolled in a social studies practicum conducted for this purpose.

A rough draft of the survey instrument, which was to be administered to the entire senior class rather than to a selected sample, was reviewed with a designated representative of each school district. Their reactions and suggestions were included in the development of the final survey instrument, a copy of which is in Appendix D-1. The method used to administer the survey was planned with each school to fit its individual situation. In some cases, a special meeting of the senior class was held; in others, the survey was administered through home rooms; and in others, it was handled through the guidance and counseling offices.

Final approval and specific arrangements for conducting the survey were made with the high school principals. Although some of the principals were concerned about the number of surveys being conducted involving high school students, most were receptive to the idea and anxious to receive the information gathered. A counselor at one of the schools was concerned about the items relating to the students' perceptions of the school services received. The school involved stated it did not want that information and insisted that items 14 through 18 be crossed off the forms administered to its seniors.

It was agreed that each school would receive a summary of the responses from all of the schools participating in the survey and the specific information from its own seniors. The schools were assured of confidentiality and that specific information from their school would not be given to other schools.

Characteristics of the Respondents

Out of the total of 2,460 seniors, 1,516 responses (61.6%) were received from 798 males and 718 females. Table 5-1 contains a breakdown of the responses by school, with each identified by a code number. The per cent responding was lower than anticipated, due partly to high absenteeism and unavailability of some of the seniors at the time of the survey and to the variation in approaches used in administering the survey by the schools.

TABLE 5-1

Number and Per Cent of Seniors Responding by High School

School	Number Enrolled	Responses			Per Cent Responses
		Male	Female	Total	
01	140	37	46	83	59.3
02	301	111	96	207	68.8
03	273	127	113	240	87.9
04	204	86	52	138	67.6
05	95	41	34	75	78.9
06	226	86	79	165	73.0
07	276	102	111	213	77.2
08	182	50	49	99	54.4
09	52	13	10	23	44.2
10	319	98	94	192	60.2
11	392	47	34	81	20.7
Totals	2,460	798	718	1,516	61.6

Most of the seniors, 52.5 per cent, identified themselves as in the middle third of their high school class; 38.2 per cent as the upper third; 7.3 per cent as the lower third; and 2 per cent did not respond to this item.

Over half of the seniors responding, 53.2 per cent, were 18 years of age; 41.7 per cent were 17 and under; and 5 per cent were 19 years of age or older. Seniors who worked over 30 hours a week while in school accounted for 12.2 per cent of the total. Another 32.3 per cent worked from 20 to 29 hours, and 31.3 per cent worked up to 20 hours a week, yielding a total of 75.8 per cent of the seniors who were employed while attending school.

There were 69.1 per cent of the students who lived with both parents, 18.1 per cent with their mother, 4.8 per cent with their father, 0.8 per cent with foster parents, and 6.9 per cent had other living arrangements. A high rate of stability in residence amongst the seniors was in evidence with 84.3 per cent having lived in the area throughout senior high school and 74.8 per cent for both junior and senior high school.

In relation to family income, it is interesting to note that 8.8 per cent of the seniors see their situation as difficult to get the necessities, 18.4 per cent think their families can afford the necessities but not luxuries, 42.7 per cent see their family situation as comfortable, and 25.8 per cent see their families as well-to-do or wealthy.

Responses

There were 23.8 per cent of the respondents who considered themselves as enrolled in a general curriculum (identified as other than vocational or college preparatory), 38.1 per cent in college preparatory, 33.3 per cent occupational related curriculums, and 3 per cent listed another curriculum. The latter were nearly all combinations of those listed in the survey form. Table 5-2 contains a breakdown of the responses by sex and curriculum identified. This table and each of the following will be a summary of the responses from all of the high schools, unless indicated otherwise.

TABLE 5-2

High School Curriculum
(Per Cent of Seniors)

High School Curriculum	Male	Female	Total
General (i.e., music, art)	22.8	25.2	23.8
College Preparatory	37.6	39.0	38.1
Industrial Arts	12.5	1.3	7.1
Trades	6.0	.6	3.4
Business and Office	6.0	18.9	12.1
Distributive Education	7.9	7.0	7.5
Health Occupations	1.5	2.2	1.8
Homemaking	.5	2.1	1.3
Agriculture	.1	-	.1
Other	3.4	2.5	3.0

Some of the respondents indicating "general" probably overlapped with other curriculums. The low interest in "health occupations" may reflect a relative newness of offerings in this area; in "homemaking," having many students take the courses earlier and now identifying with another curriculum; and in "agriculture," the urban nature of the area.

A high proportion of the seniors (81.3%) said they would or probably would continue their education after graduation. Another 10.2 per cent didn't know, while 8.3 per cent stated they would not or probably would not continue their education. Table 5-3 shows the seniors' plans based upon their reported class rank. As would be expected, a higher per cent of those in the upper third expect to continue in comparison with the middle and lower third; while a higher per cent of the lower third, in comparison with the others, stated they probably would not continue their education. All three, however, showed a much higher per cent planning to continue than not. Of significance is the higher per cent of students in the middle and lower third, compared to the upper third, who responded, "don't know." This would seem to indicate a need for an increased emphasis on guidance and counseling services for students at those academic levels.

TABLE 5-3

Plans for Continuing Their Education by Reported Class Rank
(Per Cent of Seniors)

Reported Class Rank	No or Probably Not			Yes or Probably So			Don't Know		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Upper Third	3.7	3.6	3.7	91.7	93.2	92.4	4.3	3.2	3.8
Middle Third	7.1	10.7	8.8	79.1	76.4	77.6	13.7	13.0	13.3
Lower Third	29.3	22.8	27.3	53.3	60.0	55.5	17.3	17.1	17.2

There were 80.7 per cent of the seniors who thought their parents expected or would like them to continue their education, 5.0 per cent thought they didn't care, 0.3 per cent felt their parents didn't want them to continue, and 0.1 per cent stated their parents wouldn't allow them to continue their education.

In contrast to the high percentage of students who stated they would probably continue their education, the plans of the seniors for their first year out of high school, exhibited in Table 5-4, indicate that only 49.2 per cent plan to attend school, while 23.7 per cent plan to work full time, and 3.8 per cent enter an apprenticeship. There were 15.4 per cent that listed other or varying combinations of the other plans shown in Table 5-4, with most being part-time work combined with part-time school.

TABLE 5-4

Plans for First Year after High School
(Per Cent of Seniors)

Plans for First Year	Male	Female	Total
Work Full-time	25.1	22.3	23.7
Attend school	48.2	50.8	49.2
Enter military	3.3	.1	1.8
Travel	.8	1.5	1.2
Enter an apprenticeship	6.3	1.0	3.8
Run own business	.8	-	.4
Work at home	.1	.7	.4
Become a homemaker	-	.1	.1
Don't know	2.6	2.7	2.6
Other or combinations of above	11.6	18.1	15.4

A comparison of the previously stated percentages (81.3 per cent will probably continue their education but only 49.2 per cent will attend school next year), indicates that many of the students planning to continue their education will do something else first and then return to their education. Also, since a total of 27.5 per cent plan to work full time or enter an apprenticeship and only 8.7 per cent indicate they probably will not continue their education, many evidently anticipate receiving training on or through their jobs.

All of the seniors were asked to indicate three fields that they would have most interest in for further study after graduation, in a first, second and third choice order. Table 5-5 summarizes their responses on a per cent basis, with the fields of interest grouped as much as possible into the same occupational areas used in the business/industry survey. Appendix D-2 shows the actual number of students selecting each field of interest in the order they appeared on the survey form. Table 5-5(A) shows the fields of interest most commonly listed under "other" in a ranking order of the number of responses. Communications was cited most often by both males and females, and music was next for both.

Table 5-5

FIELDS OF INTEREST FOR FURTHER STUDY
(Percent of Seniors in Order of Interest)**

ield of Interest	1st	2nd	3rd
usiness			
Accounting	3.2	2.5	2.7
Agri-Business	0.3	0.5	0.6
Bookkeeping	0.3	1.6	1.1
Business Administration	10.4	6.4	3.2
Clerical Worker	1.6	1.4	1.2
Computer Operator/Prog.	3.9	2.8	3.5
General Business Worker	0.8	1.3	1.9
Key Punch Operator	0.5	0.8	0.5
Secretarial	1.9	2.1	1.1
Receptionist (Business)	0.7	2.1	1.7
Salesman/Selling	1.3	2.3	2.0
ndustry			
Appliance Repair	0.2	0.3	0.1
Air Cond./Refrigeration	0.1	0.1	0.1
Mechanics, Automotive	3.5	2.5	2.5
Mechanics, Farm	0.1	0.2	0.2
Mechanics, Aircraft	1.0	1.1	1.3
Mechanics, Heavy Equipt.	0.7	1.0	1.0
Machinist	0.9	0.8	1.1
Welding	1.3	1.8	1.8
Drafting	1.7	2.1	1.6
Electrician	1.7	1.3	1.9
Carpentry	2.8	3.0	1.8
Painter	0.3	0.8	1.1
Plumber	0.7	0.8	0.7
ealth Care			
Receptionist (Dent/Med)	0.3	0.6	0.8
Nurses Aide	0.4	0.6	0.3
Dental Asst./Hygienist	0.9	0.8	0.4
Dental Lab. Technology	0.3	0.2	0.5
Medical Lab. Technology	0.5	1.1	0.7
X-Ray Technology	0.2	0.4	1.1
Nursing (RN/LPN)	1.5	0.6	0.8

Field of Interest	1st	2nd	3rd
Services			
Food Services Mgmt.	0.7	0.8	1.3
Hotel/Motel Management	0.7	1.1	1.6
Lawn-Landscape Worker	0.7	0.9	0.7
Floristry	0.4	0.3	0.9
Commercial Art & Art	2.4	3.3	1.9
Cook or Baker	0.3	0.9	1.0
Hotel/Restaurant Worker	0.0	0.3	0.6
Beauty Operator	1.5	1.1	0.9
Child Care Aide	0.8	1.4	0.9
Law Enforcement	1.1	1.7	1.8
Recreational Director	1.1	1.8	1.8
Social Worker Aide	0.7	1.7	1.7
Waiter or Waitress	0.2	0.2	0.5
Fire Science	0.3	0.4	0.1
Airline Stew./Worker	5.0	4.4	4.3
Dramatic Arts	1.5	2.1	1.7
Engineering Technology	3.0	3.0	1.7
Printing Technology	0.4	0.4	0.3
Professional			
Teaching (Elem./Sec)	2.5	2.1	2.3
Pre-Dentistry	0.7	0.9	0.4
Pre-Medicine	2.3	1.7	1.4
Pre-Law	2.7	1.9	2.3
Pre-Engineering	2.8	2.9	1.7
Other			
Forestry	1.9	2.3	3.4
Homemaking	0.3	0.8	2.5
Liberal Arts & Sciences	2.1	1.6	1.8
Other	17.1	6.7	4.0
Did Not Respond	3.0	9.8	17.5

105

**The percentages are based upon 1507 responses for each choice.

TABLE 5-5(A)

Summary of "Other" Fields of Interest for Further Study after High School
(By Number of Respondents)

Field of Interest	Male	Female	Total
Communications	30	36	66
Music	24	18	42
Sports and Athletics	19	10	29
Architecture	20	8	28
Photography	10	10	20
Fashion	1	18	19

Since the seniors' interests for further study would probably go to their second (and third) choices only if their first (and second) could not be realized, the responses were weighted to provide a basis for comparison. Each first choice was counted as 5, each second 3, and each third 1. Table 5-6 contains a list of the fields of interest in order of their weighted preferences.

TABLE 5-6

Fields of Interest Ranking

1.	Business Administration	1,121	21.	Clerical Worker	201
2.	Airline Stew./Worker	641	22.	Recreational Director	188
3.	Computer Operator/Prog.	473	23.	Law Enforcement	185
4.	Mechanics, Automotive	409	24.	Beauty Operator	179
5.	Accounting	392	25.	Receptionist	174
6.	Engineering Technology	386	26.	Social Worker Aide	159
7.	Carpentry	372	27.	Nursing (RN/LPN)	149
8.	Pre-engineering	367	28.	General Business Worker	148
9.	Commercial Art & Art	356	29.	Mechanics, Aircraft	146
10.	Pre-law	324	30.	Child Care Aide	136
11.	Teaching (Elem./Sec.)	315	31.	Hotel/Motel Management	127
12.	Liberal Arts & Sciences	307	32.	Machinist	122
13.	Forestry	293	33.	Dental Asst./Hygienist	112
14.	Pre-medicine	271	34.	Mechanic/Heavy Equipment	110
15.	Secretarial	258	35.	Bookkeeping	109
16.	Drafting	250	36.	Food Services Management	106
17.	Dramatic Arts	234	37.	Lawn/Landscape Worker	103
18.	Salesman/Selling	232	38.	Medical Lab Technology	102
19.	Electrician	214	39.	Pre-dentistry	100
20.	Welding	208	40.	Homemaking	98

(Continued on next page)

TABLE 5-6 (Cont.)

41.	Plumber	96	50.	X-ray Technology	49
42.	Cook or baker	79	51.	Fire Science	39
43.	Key Punch Operator	79	52.	Dental Lab Technology	36
44.	Painter	73	53.	Waiter or Waitress	31
45.	Receptionist (Dent/Med)	64	54.	Appliance Repair	29
46.	Nurses Aide	61	55.	Hotel/Restaurant Worker	21
47.	Floristry	58	56.	Mechanics, Farm	17
48.	Agri-business	55	57.	Air Cond./Refrigeration	13
49.	Printing Technology	52			

If the "other" fields of interest listed in Table 5-5(A) were all first choice, communications would be weighted 330, ranking tenth in the list of fields of interest; and music would be 210, ranking twentieth.

When asked the kind of job they would like to have ten years from now, the greatest number of respondents listed business administration, and the next largest number, engineering. Table 5-7 shows the most common responses in ranked order based upon the number of responses. Table 5-7(A) has the ranked order for males and females. The kinds of jobs the seniors state they would like to have ten years from now generally parallel the fields of interest for further study after graduation, (Table 5-6); i.e., business administration, airlines, computer operator/programmer, accounting, and engineering appear high on both lists. This would indicate that the immediate interests of the seniors tie in with their long-range job ambitions.

When asked if the field of study of most interest to them was offered at a convenient location from their home, 54.8 per cent of the males and 62.5 per cent of the females responded that it was. This would suggest that most of the seniors feel that the right opportunity for post-high school education or training is available to them.

Those seniors responding "yes" or "probably yes" to continuing their education after graduation were requested to indicate where they expected to enroll. Table 5-8 contains their responses. Grouping the responses shows that 29.4 per cent expect to enroll in a community college, 32.4 per cent in a four-year college or university in Washington, and 4.6 per cent expect to enroll in a vocational-technical school. There were 2.2 per cent that expect to enroll in a college or university outside the state. Most of the responses for "other" schools listed specific out-of-state colleges or universities (49). Several identified community colleges (20), business or technical schools (6), and military training schools (12).

TABLE 5-7

Kinds of Jobs Seniors Would Like to Have Ten Years from Now
(By Number of Respondents)

Kind of Job	Male	Female	Total
1. Business Administration	56	48	104
2. Engineering	68	13	81
3. Airlines	34	26	60
4. Computer operator/programmer	21	19	40
5. Accountant	18	22	40
6. Architect	29	9	38
7. Secretary	-	38	38
8. Law	20	18	38
9. Sports and Sports Related	19	16	35
10. Art/Commercial Art	12	21	33
11. Teaching	9	23	32
12. Auto Mechanics	27	2	29
13. Pre-medicine	13	16	29
14. Music	17	11	28
15. Communications	12	15	27
16. Fashion	2	22	24
17. Mother/housewife	-	22	22
18. Skilled Trades	20	2	22
19. Social Worker	1	20	21
20. Entertainment	13	8	21
21. Forestry and Wildlife	14	6	20

TABLE 5-7(A)

Kind of Job Wanted Ranked by Sex
(By Number of Respondents)

Male		Female	
1. Engineering	(68)	1. Business Administration	(48)
2. Business Administration	(56)	2. Secretarial	(38)
3. Airlines	(34)	3. Airlines	(26)
4. Architect	(29)	4. Teaching	(23)
5. Auto Mechanics	(27)	5. Accountant	(22)
6. Computer Operator/Prog.	(21)	6. Fashion	(22)
7. Law	(20)	7. Mother/Housewife	(22)
8. Skilled Trades	(20)	8. Art/Commercial Art	(21)
9. Sports & Sports Related	(19)	9. Social Work	(20)
10. Accountant	(18)	10. Computer Operator/Prog.	(19)
11. Music	(17)	11. Law	(18)
12. Forestry & Wildlife	(14)	12. Pre-medicine	(16)
13. Pre-medicine	(13)	13. Sports & Sports Related	(16)
14. Entertainment	(13)	14. Communications	(15)
15. Communications	(12)	15. Engineering	(13)
16. Art/Commercial Art	(12)	16. Music	(11)

TABLE 5-8

Schools They Expect to Enter
(Per Cent of Seniors)

College/University/School	Male	Female	Total
Washington State University	3.8	2.8	3.3
University of Washington	19.2	19.0	19.1
Central Washington University	2.0	1.8	1.9
Eastern Washington University	.6	.7	.7
Western Washington University	1.4	2.7	2.0
Evergreen State College	.5	.4	.5
Seattle University	1.6	2.7	2.1
Seattle Pacific University	.8	2.2	1.5
South Seattle Community College	6.5	5.5	6.0
North Seattle Community College	1.3	.6	.9
Seattle Central Community College	3.1	4.8	3.9
Highline Community College	10.3	18.2	14.0
Green River Community College	2.9	1.1	2.0
Other Community College in Washington	3.6	1.5	2.6
Other College/University in Washington	.8	2.0	1.3
College/University outside Washington	2.3	2.2	2.2
Vocational-Technical School	6.7	2.4	4.6
Other	13.2	11.0	12.1

To determine the percentage of high school seniors who might be expected to participate in higher education because of their choice of occupation, the occupational titles in Table 5-5 were regrouped into four classifications dependent upon the extent of postsecondary education necessary to prepare for the occupation. Using the weighted scores in Table 5-6 as a basis for calculation, it was estimated that 7 per cent of the students were most interested in apprenticeable trades, 10 per cent in careers for which high school graduation is adequate preparation, 47 per cent in occupations requiring two-year college training, and 36 per cent were most interested in

occupations usually requiring four-year college or university training. Since 34 per cent of the students stated they would attend a community college or vocational-technical school, 34.6 per cent stated they would like to attend a four-year college or university, and approximately 19 per cent did not contemplate further education or did now know, the match between occupational choice of the seniors and their intent to participate in further education appears reasonable.. Recognize, however, that the extent of postsecondary education required of an occupation is not constant and is a subjective judgment of the investigators. Furthermore, figures above are in aggregate, and it is necessary to compare each individual student's occupational choice with his plans for participating in postsecondary education to determine with some degree of accuracy whether the student perceptions are realistic.

The seniors who stated they "do not" or "probably do not" plan to continue their education were asked why. Table 5-9 contains a list of reasons and the per cent of seniors selecting each reason. The most common reasons were "want to work and make money" and "tired of school."

TABLE 5-9

Reasons of Seniors Who Do Not Plan to Continue Their Education
(Per cent of Seniors)

Reason	Male	Female	Total
Tired of School	14.6	14.2	14.4
Want to work and make money	20.7	18.5	19.7
Too expensive; can't afford it	7.8	9.5	8.6
Want to get married	2.8	5.4	4.0
Parents don't want me to	1.1	.3	.7
People who don't continue in school can get ahead just the same	7.7	4.7	6.5
Waste of time	5.3	2.9	4.2
Can't make good enough grades	7.5	6.8	7.2
Poor health	.8	.6	.7
Other	3.4	3.1	3.2

Those seniors whose future plans "do not" or "probably do not" include continuing their education were asked if they would change their plans if they had more money. Answers of "yes" or "maybe" were made by 16.9 per cent of these seniors (19.7 per cent of the males and 13.8 per cent of the females), while 9.4 per cent answered "no" (10.3 per cent of the males and

8.3 per cent of the females). When asked the amount of money needed to attend school, 11.3 per cent of the students said "enough to pay all expenses," and 5.8 per cent said "enough to pay half the expenses." Since these responses apply only to those seniors not planning to continue their education (8.3 per cent), relating it to the entire senior class suggests that only an additional 1.4 per cent of the respondents would continue their education if they had more money.

The seniors were asked to respond to an item asking why some of their high school classmates and friends might not enroll in a community college. The responses are contained in Table 5-10. The most important reasons appear to be lack of desired programs, college image (i.e., wanted a better college), and lack of financial resources.

TABLE 5-10

Per Cent of Seniors by Importance of Reasons Why Friends and Classmates Do Not Plan to Enroll at a Community College

Reasons Why Classmates Don't Plan to Enroll at a Community College	No Importance			Some Importance			Much Importance		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Costs are too high	29.6	30.7	30.1	32.9	34.4	33.6	18.1	22.6	20.2
Want better college	20.3	16.3	18.3	32.1	30.8	31.4	28.4	39.2	33.4
Want to live away from home	25.5	20.4	23.0	36.7	44.2	40.2	16.7	22.0	19.2
Types of students who go there	30.8	38.8	34.5	34.0	33.2	33.5	11.8	12.1	11.9
Inadequate information about community colleges	23.1	25.5	24.2	34.8	42.5	38.4	20.1	17.3	18.7
Advice of high school counselors	23.4	28.0	25.5	36.0	38.5	37.1	16.1	16.0	16.0
Advice of high school teachers	23.4	27.5	25.3	39.3	43.4	41.2	12.4	12.3	12.3
Program wanted not offered at a community college	11.6	9.2	10.4	23.7	25.7	24.6	42.3	50.9	46.3
Lack of transportation	28.0	24.4	26.3	32.7	33.2	32.8	15.6	26.8	20.8
Lack of college atmosphere	23.0	23.0	23.0	37.6	42.0	39.6	15.5	19.0	17.1
Lack of financial assistance	21.6	19.1	20.4	32.3	32.6	32.4	23.5	32.5	27.7
Other	4.8	2.2	3.6	2.1	.8	1.5	3.5	5.0	4.2

Seniors' Evaluation of High School Preparation

In order to provide information to the high schools on student perceptions of counseling, guidance, and resource services needed by high school students, the seniors were asked about their high school preparation. Since one of the high schools did not want their services evaluated and requested that the items relating to this area not be asked of its students, the percentages reflect only the other ten high schools. This changes the base of responses from 798 males, 718 females, and a total of 1,516, to a base of 700 males, 624 females, and a total of 1,324.

Responses in Table 5-11 show how well the seniors thought high school was preparing them for their future. The responses of the students who plan to continue their education after graduation are in the columns headed "yes." Those who do not plan to continue are in the columns headed "no." The largest per cent of the students, 31.8 per cent, rated their preparation as "fair, but all could be better;" 17.6 per cent said, "not very well;" 26.1 per cent rated it as "very good in most ways, but could be better in other ways;" and 10.4 per cent said, "it is giving me just what I need." The students planning to continue their education rated their high school preparation higher (34.4 per cent "fair, but all could be better") than those not planning to continue (36.9 per cent "not very well"). This would indicate a need for greater emphasis in counseling and guidance services for the non-college-bound students.

TABLE 5-11

How Well is High School Preparing You for What You Want to do
(Per Cent of Seniors by Plan for Further Education)

How Well High School Prepared for Future	Boys by Plan			Girls by Plan			Total by Plan		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
Not very well	13.9	39.1	17.4	14.5	34.5	17.7	14.2	36.9	17.6
Fair, but all could be better	37.3	18.8	34.1	31.3	15.5	29.2	34.4	17.2	31.8
Very good in most ways, but could be better in other ways	27.4	12.5	24.8	29.8	15.5	27.5	28.5	13.9	26.1
It is giving me just what I need	10.1	7.8	9.9	11.1	10.3	10.9	10.5	9.0	10.4
No response	11.3	21.8	13.7	13.3	24.1	14.7	12.2	23.0	14.1

The amount of help the seniors felt they received in making their future plans is shown in Table 5-12, with 12.9 per cent responding that they had received "a lot of help; all I need."

TABLE 5-12

Amount of Help Received from High School in Choosing an Occupation or in Making Future Educational Plans
(Per Cent of Seniors)

Amount of Help Received	Male	Female	Total
A lot of help; all I need	12.7	13.0	12.9
Considerable, but could have used more	18.2	21.2	19.7
Some help, but not very much	26.5	27.6	27.1
Little or no help	29.3	23.6	26.5

The students were asked to rate the amount of help received from various high school services and facilities on a good, fair, or poor basis. Table 5-13 contains a summary of the responses, and Table 5-14 shows them according to the student's reported class rank. Information on going to college was highest in both tables for the amount of help received.

TABLE 5-13

Amount of Help Received from High School Services and Facilities
(Per Cent of Seniors)

	Male			Female			Total		
Service or Facility	Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Poor
Someone I can confide in about school problems.	24.2	39.1	21.4	26.2	36.5	21.5	25.1	37.8	21.4
Library materials on careers	21.6	45.9	17.5	24.0	42.7	17.4	22.7	44.3	17.4
Offering many courses from which to choose	19.1	42.6	23.4	17.6	43.0	23.7	18.3	42.7	23.5
Information on going to college	41.1	35.1	8.3	45.3	32.1	7.1	43.0	33.6	7.7
Social activities	27.1	41.7	15.7	29.7	41.3	12.6	28.3	41.4	14.2
Someone I can confide in about personal problems	13.3	30.9	39.3	17.4	29.0	36.8	15.2	29.9	38.1

TABLE 5-14

Amount of Help Received From High School Services And Facilities According to the Student's Reported Class Rank

Selected Services and Facilities	Top Third			Middle Third			Lower Third		
	Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Poor
Someone I could confide in about school problems									
Boys	28.8	40.8	18.1	23.0	39.5	21.3	17.3	30.7	33.3
Girls	31.9	34.4	16.5	23.1	39.9	23.1	14.3	20.0	45.7
Library materials on careers									
Boys	23.4	44.8	19.4	21.6	48.8	14.0	17.3	34.7	28.0
Girls	25.4	40.9	17.2	23.1	45.3	17.4	20.0	34.3	20.0
Variety of courses from which to choose									
Boys	22.1	42.8	22.7	18.9	44.4	21.3	9.3	30.7	40.0
Girls	21.1	46.2	16.5	16.1	40.7	29.3	11.4	37.1	25.7
Information on going to college									
Boys	43.8	35.8	8.0	41.2	34.3	7.6	33.3	34.7	13.3
Girls	49.5	29.4	6.1	43.8	33.9	7.8	31.4	34.3	11.4
Social activities									
Boys	28.1	42.5	16.7	27.5	41.7	14.5	24.0	37.3	20.0
Girls	31.9	43.7	8.6	29.3	40.9	14.0	14.3	31.4	31.4
Someone I could confide in about personal problems									
Boys	16.1	30.4	39.5	12.3	31.6	39.0	9.3	28.0	42.7
Girls	22.3	28.2	36.5	14.2	30.5	37.2	8.6	27.2	43.6

Summary

1. Over half of the seniors, 53.2 per cent, were 18 years of age; 41.7 per cent were 17 and under, and 5 per cent were 19 or older. Seventy-six per cent held jobs. Sixty-nine per cent lived with both parents and 22.9 per cent lived with one parent. Eighty-four per cent had lived in the area throughout senior high school, 74.8 per cent during both their senior and junior high school years.

2. The largest per cent were in a college preparatory curriculum, 38.1 per cent; 33.3 per cent were in occupational related curriculums; and 23.8 per cent were in a general curriculum.

3. Most, 81.3 per cent, said they would probably continue their education sometime after graduation.

4. For their first year out of high school, 49.2 per cent plan to attend school, and 23.7 per cent plan to work full time.

5. On a weighted basis, business administration, the highest-rated field of interest, outranked the second most popular choice, airline worker, by nearly two to one.

6. Nearly one-third, 32.4 per cent, expect to enroll in a four-year college or university, 29.4 per cent in a community college, and 4.6 per cent in a vocational-technical school.

7. Those not planning to continue their education gave as the most common reason "want to work and make money," and "tired of school."

8. When asked why some of their friends might not enroll at a community college, the reasons given as most important were a lack of desired programs, wanted a better college, and a lack of financial resources.

9. The students planning to continue their education rated their high school preparation higher than the students not planning to continue their education.

10. Approximately 13 per cent of the students felt they had received all the help that they needed in choosing an occupation or in making future educational plans.

11. In regard to the amount of help received from high school services and facilities, both the male and female students rated "information on going to college" highest.

Conclusions

1. Seniors for the most part (68.5 per cent) see their family income position as comfortable or well off. Money, therefore, does not seem to be a negative factor in the determination of whether a student will continue education past high school. Also, less than one-fifth of those not continuing might change their minds if they had more money.

2. The relationship between high school curriculum (38.1 per cent in college preparatory, 33.3 per cent in occupational related) and occupational choices requiring further education (47 per cent interested in occupations requiring two-year college training, 36 per cent interested in occupations requiring four-year college training) seems reasonable and and suggests that the community college can expect to enroll approximately one-third of the high school graduates in occupational programs and another 10 to 20 per cent in the transfer program.

3. Up to 50 per cent of the students who plan to continue their education may do something else first (81.3 per cent intend to continue, but only 49.2 per cent next year).

4. Looking at the top twelve fields of interest, the community college is involved to some extent in training students for each of them. In cases such as business administration, all Seattle community colleges are involved, as are all community colleges contiguous to the Seattle district. In other cases, such as airline worker, mechanics and carpentry, only one community college in the Seattle area offers the program (i.e., Highline, South Seattle, Seattle Central for the three examples).

5. Looking at the lowest rated twelve fields of interest, one finds the community colleges training for ten of them. On the basis of student interest, it might be expected that the food science division and the floristry department will need to place a greater emphasis on providing information about their programs than will the automotive, college transfer, or business and office divisions.

6. The high interest in engineering technology (sixth on the list) and pre-engineering (eighth) suggests the fact that the college transfer and engineering technology divisions, working together toward a transferable engineering program, will have much appeal to high school seniors.

7. Other factors of interest not included in this survey will be reported at a later time. This involves multiple correlation comparing, on a student-by-student basis, the curriculum in which they are participating in high school, family income, occupational choices, desire to participate in higher education, parental interest in their continuing education, aspirations for a job ten years hence, their estimated grade point average, and their opinions about community colleges.

CHAPTER VI: 1977 HIGH SCHOOL GRADUATES

To learn about young persons recently out of high school, a study was made of the 1977 graduates from the eleven high schools in the area served by South Seattle Community College. The purposes were to learn (1) what the graduates had done since leaving high school, (2) what they are doing at the present time, (3) their plans for the future, and (4) their needs and desires for additional educational-cultural services and activities.

Since the schools were the same ones covered in the high school seniors survey, the same informational developmental and planning approaches were used, with many of the administrative arrangements made for both surveys at the same time.

The schools were:

Cleveland High School	Seattle School District
Franklin High School	Seattle School District
Rainier Beach High School	Seattle School District
Project Interchange	Seattle School District
West Seattle High School	Seattle School District
Chief Sealth High School	Seattle School District
Foster High School	South Central School District
Kennedy High School	Archdiocese of Seattle
Evergreen High School	Highline School District
Vashon High School	Vashon Island School District

The original plan was to mail a questionnaire to a twenty-five per cent random sample of the 1977 graduates. The 1977 graduates, having been out of high school for two years, would have a feel for what the "outside world" was like, yet still be able to relate to the high school. They would provide a view from the young person's perspective as well as a basis for comparison with the high school seniors. A copy of the survey instrument, similar to that used with the high school seniors, is in Appendix E-1.

Procedure

To encourage responses from the graduates, it was decided to administer the survey through their own high schools. Each would receive the survey form with a cover letter from his/her high school principal on school letterhead paper, with a stamped, return envelope addressed to the high school. A follow-up would be conducted as needed.

Two of the high schools, Foster and Vashon, requested that their entire 1977 graduating class be sampled. Seattle, to protect their students' privacy, wanted them contacted through the school district's planning, research and evaluation office and a private mailing service firm. Since a follow-up under this arrangement could not be done within a reasonable time frame, a one-out-of-three sample was used to achieve a return hopefully equivalent to those high schools using a 25 per cent sample with follow-up. Since the samples varied from 25 to 100 per cent of the 1977 graduating classes and follow-up procedures also varied, statistical analyses is not possible. However, the returns furnished data quite suitable for the purposes of this study.

Table 6-1 summarizes the information about the survey responses. It lists the schools identified by code numbers, the number of graduates, the net size of the sample (total less those that were non-deliverable) by sex, the number of responses, and the percent of return. Because of the different approach used in reaching the Seattle graduates, the table is set up in two parts, the first having the high schools outside Seattle and the second having the Seattle high schools.

The total sample was 889. Three hundred forty-seven responses were received for a 39.0 per cent return. A breakdown of these figures shows a 27.9 per cent response from the Seattle High school graduates and a 54.6 per cent return from the other high school graduates. The higher return from the other school graduates probably was because of a more personalized approach and a follow-up mailing.

TABLE 6-1

Number and Per Cent of 1977 Graduates Responding
(By high school and sex)

School	Number of Graduates	Males			Females			Totals		
		No. in Sample	No. Resp.	% Resp.	No. in Sample	No. Resp.	% Resp.	No. in Sample	No. Resp.	% Resp
Outside Seattle										
01	150	47	23	48.9	64	32	50.0	111	55	49.5
02	229	24	19	79.2	30	25	83.3	54	44	81.5
03	364	43	10	23.3	36	21	58.3	79	31	39.2
04	248	21	9	42.9	27	15	55.6	48	24	50.0
05	125	36	21	58.3	42	27	64.3	78	48	61.5
Subtotal	1,116	171	82	48.0	199	120	60.3	370	202	54.6
Seattle										
06	211	37	8	21.6	41	11	26.8	78	19	24.4
07	331	50	10	20.0	48	20	41.7	98	30	30.6
08	140	26	5	19.2	25	6	24.0	51	11	21.6
09	35	6	2	33.3	6	-	-	12	2	16.7
10	339	76	13	17.1	62	28	45.2	138	41	29.7
11	384	71	17	23.9	71	25	35.2	142	42	29.6
Subtotal	1,440	226	55	20.7	253	90	35.6	519	145	27.9
Total	2,556	437	137	31.4	452	210	46.5	889	347	39.0

Characteristics of Respondents

Out of a total of 347 respondents, 137 were male and 210 were female. Overall, 31.4 per cent of the males and 46.5 per cent of the females responded to the survey. The highest proportion of respondents, 32 per cent, had been enrolled in a college preparatory curriculum in high school. This was followed by a general curriculum with 24.8 per cent and business and office/distributive education with 20.1 per cent. Table 6-2 contains the curriculum breakdown by sex for all of the respondents. A review of the responses from each high school shows some variation, but all had the college preparatory and general curriculums in the three highest percentages. The respondents listing "other" curriculums had varying combinations of the ones shown in the table.

TABLE 6-2

The High School Curriculum of the 1977 Graduates
(By Per Cent of Respondents)

High School Curriculum	Male	Female	Total
General	24.1	25.2	24.8
College Preparatory	32.1	31.9	32.0
Industrial Arts	11.7	-	4.6
Trades	3.6	1.9	2.6
Business and Office	2.2	21.4	13.8
Distributive Education	6.6	6.2	6.3
Health Occupations	.7	1.4	1.2
Homemaking	.7	3.3	2.3
Agriculture	-	-	-
Other	16.1	6.6	10.4

Most of the 1977 graduates responding to the survey (82.2 per cent) have remained in the Seattle area. Eleven per cent reside in Washington state outside the Seattle area, and 5.5 per cent live outside the state. There were 131 (37.8 per cent) of the 347 respondents working full-time, 74 (21.3 per cent) attending school full-time, and 128 (36.9 per cent) who stated "other (or combinations)" for their present activity. An analysis of the "other (or combinations)" indicated that most were varying combinations of work and school, with 71 attending school full-time and working part-time, and 10 attending school part-time and working full-time. Eight of the females listed "mother or housewife." Table 6-3 shows the percentages for all of the respondents.

TABLE 6-3

What the 1977 Graduates are Doing Now
(By Per Cent of Respondents)

Present Activity	Male	Female	Total
Working, Full-time	36.5	38.6	37.8
Working, Part-time	2.2	2.4	2.3
Attending School, Full-time	21.9	21.0	21.3
Attending School, Part-time	2.2	.5	1.2
Other (or combinations)	36.5	37.1	36.9

Since high school graduation two years earlier, 139 of the respondents (40.1 per cent) received training or education on the job, 148 (42.7 per cent) at a community college, 125 (36.7 per cent) at a college or university, 24 (6.9 per cent) at a vocational-technical school, and 32 (9.2 per cent) received no training or education. Table 6-4 shows this information by sex summed up for all the schools. The totals are greater than 100 per cent, as many have received training or education from more than one source. The "other" category included three listing modeling school and a variety of individual schools.

TABLE 6-4

Training or Education Received Since Graduation
(By Per Cent of Graduates)

Training/Education Received	Male	Female	Total
None	9.5	9.0	9.2
On-The-Job	38.0	41.4	40.1
Business College	0.7	1.4	1.2
Voc-Tech School	8.0	6.2	6.9
Community College	39.5	44.8	42.7
College or University	40.2	34.6	36.7
Adult Education	-	1.4	.9
Correspondence Course	-	1.9	1.2
Military Service School	8.0	-	3.2
Other	3.6	2.9	3.2

One hundred ninety-two (55.3 per cent) of the 1977 graduates had received training in a day school, 71 (20.5 per cent) in an evening school, and 7 (2.0 per cent) at week-end classes. At the time of the survey, 149 (42.9 per cent) of the graduates were attending classes during the day, 17 (4.9 per cent) evening classes, and 19 (5.5 per cent) had varying combinations of day, evening and week-end classes.

Since 37.8 per cent of the 1977 graduates are working full time, 40.1 per cent have received on-the-job training, and 42.7 per cent received training at a community college, the importance of training at an "operational" level becomes apparent. The per cent of 1977 graduates attending college or a technical school is shown in Table 6-5 along with the schools where the 1979 seniors stated they planned to attend (Table 5-6, Chapter V). To illustrate the comparison, 19.1 per cent of the 1979 high school seniors stated they planned to attend the University of Washington, and 16.7 per cent of the 1977 high school graduates stated they had attended there. The schools listed under "other" in Table 6-5 were combinations of schools the respondents had attended or ones that could have been checked in the table.

TABLE 6-5

A Comparison of Where the 1979 High School Seniors Planned to Attend School with Where the 1977 Graduates Reported They Did Attend School
(By Per Cent of Seniors and Graduates)

	Seniors Planned to Attend			Graduates Did Attend		
College/University/School	Male	Female	Total	Male	Female	Total
Washington State University	3.8	2.8	3.3	8.7	3.4	5.5
University Of Washington	19.2	19.0	19.1	21.1	13.8	16.7
Central Washington University	2.0	1.8	1.9	3.0	2.4	2.6
Eastern Washington University	.6	.7	.7	-	1.0	.6
Western Washington University	1.4	2.7	2.0	2.2	3.9	3.2
Evergreen State College	.5	.4	.5	-	1.0	.6
Seattle University	1.6	2.7	2.1	1.5	3.8	2.9
Seattle Pacific University	.8	2.2	1.5	-	1.0	.6
South Seattle Community College	6.5	5.5	6.0	4.4	6.2	5.4
North Seattle Community College	1.3	.6	.9	.7	1.0	.9
Seattle Central Community College	3.1	4.8	3.9	9.5	6.2	7.5
Highline Community College	10.3	18.2	14.0	15.3	24.3	20.9
Green River Community College	2.9	1.1	2.0	3.0	3.8	3.4
Other Community College in Wash.	3.6	1.5	2.6	6.6	3.3	4.6
Other College/University in Wash.	.8	2.0	1.3	1.5	1.4	1.4
College/University Outside Wash.	2.3	2.2	2.2	2.2	2.9	2.6
Vocational Technical School	6.7	2.4	4.6	8.0	6.2	6.9
Other	13.2	11.0	12.1	9.5	8.6	8.8

The information in Table 6-6 shows by categories of school that 29.4 per cent of the 1979 seniors planned to attend a community college and that 42.7 per cent of the 1977 graduates actually did. This large difference may be accounted for by individuals who combine work with school, those who find more complete training in a shorter time at a community college, and those who attend a community college in preparation for going to a four-year institution. Since each category shows a higher percentage with the 1977 graduates, it indicates more are going to school than had planned to as seniors. While there were 18.5 per cent of the 1979 seniors who planned to not continue their education or did not know, only 10.4 per cent of the 1977 graduates did not continue their education.

TABLE 6-6

A Comparison of Where the 1979 High School Seniors Planned to Attend School with Where the 1977 Graduates Reported They Did Attend By Categories of Schools
(By per cent of Seniors and Graduates)

	1979 High School Seniors Planned to Attend			1977 Graduates Did Attend		
Category of School	M	F	T	M	F	T
4-year College or Univ.	33.0	36.5	34.6	40.2	34.6	36.7
Community College	27.7	31.7	29.4	39.5	44.8	42.7
Voc-technical School	6.7	2.4	4.6	8.0	6.2	6.9

When asked how they thought their parents or guardians felt about additional schooling after high school, 26.9 per cent responded "insisted that I go" or "wanted me to if I wanted to;" 34.6 per cent "didn't care either way;" and 32.0 per cent responded "did not want me to go." These responses are in contrast to those of the 1979 high school seniors, 80.7 per cent of whom reported their parents expected or would like them to continue their education.

The reasons for those not attending school at the time of the survey are summarized in Table 6-7, with the per cents based upon the total number of respondents rather than on those not attending school. The most common reason was working full-time (32.3 per cent), and the second was financial (16.4 per cent), with 55 out of the 57 giving this reason, stating they would be attending school if more financial help were available. Most of the responses under "other" were "I am undecided," or "I am waiting until next fall."

TABLE 6-7

The Reasons for Those Not Attending School Now
(By Per Cent of Graduates)

Reason for Not Attending	Male	Female	Total
Working Full-Time	32.8	31.9	32.3
Program Not Available Near Where Live	2.2	2.4	2.3
Financial Reasons	10.9	20.0	16.4
Family Responsibilities	2.9	8.1	6.1
Not Interested	6.6	6.2	6.3
Already Completed It	1.5	1.9	1.7
Too Difficult to Make Grades	2.9	1.0	1.7
Didn't Take College Preparatory Sub.	6.6	3.8	4.9
Now in Military Service	3.6	-	1.4
Don't Know What Is Offered	2.2	5.7	4.3
Other	13.1	15.7	12.1

Over half (51.6 per cent) of the 1977 high school graduates responding thought there were adequate training and educational opportunities in the area where they graduated. Another 40.6 per cent stated the opportunities were fair but not all could find what they wanted, while 6.6 per cent thought the opportunities were poor and more should be made available. This indicates a need to compare the offerings of the community colleges with the expressed needs of the respondents, to inform them of what is available, and to consider the feasibility of adding other offerings that are appropriate.

There were 88.5 per cent of the graduates responding who stated they now were interested in an opportunity for further education or training. Table 6-8 lists the types of education they were interested in with the number of respondents for each. A comparison of this listing with the weighted fields of interest for further study of the 1979 high school seniors (Table 5-6) shows business administration, computer science, and teaching high on both lists. The purposes of education or training given were to prepare for a new job, 37.2 per cent; finish a program already started, 17.9 per cent; self-improvement, 16.4 per cent, and improve in present job, 6.9 per cent.

TABLE 6-8

Type of Education or Training in Which 1977 High School Graduates Expressed Interest
(By Number of Respondents)

Type of Education	Male	Female	Total
Business Administration	17	22	39
Computer Science	5	9	14
Secretarial	-	12	12
Teaching	3	9	12
Art/Commercial Art	3	8	11
Airlines	4	4	8
Communications	2	6	8
Engineering	6	1	7
Fashion	-	7	7
Architecture	6	1	7
Law	4	3	7
Electronics	4	2	6
Forestry/Wildlife	2	3	5
Photography	3	2	5

When asked what type of work they planned to be doing ten years from now, 40.6 per cent stated "professional," which was defined as requiring graduation from a four-year school and possibly an advanced degree. Semi-professional, technical, or middle business occupations, defined as usually requiring two years of college or technical education, were selected by 21 per cent. Table 6-9 shows the responses by sex for all of the respondents.

TABLE 6-9

Type of Work You Plan to be Doing Ten Years From Now
(by Per Cent of Graduates)

Type of Work	Male	Female	Total
Unskilled	-	1.0	.6
Semi-Skilled	8.8	17.1	13.8
Skilled	16.8	10.0	12.7
Semi-Professional, Technical, or Middle Business Occupation	21.2	21.0	21.0
Professional	46.0	37.1	40.6
None of These	.7	1.9	1.4
Don't Know	6.6	11.4	9.5

When asked if they had decided what kind of job they would like to have ten years from now, 218 (62.8 per cent) responded "yes." Table 6-10 lists the kinds of jobs they would like with the number responding to each. The kinds of jobs listed generally correspond with the type of education of interest (Table 6-8) with four of the first seven appearing in both lists.

TABLE 6-10

Kind of Job 1977 High School Graduates Would Like to Have Ten Years From Now
(By Number of Respondents)

Kind of Job	Male	Female	Total
Teacher	1	18	19
Business Administration	7	10	17
Communications	9	7	16
Engineering	8	3	11
Law	5	5	10
Computer Science	2	6	8
Secretarial	0	8	8
Architecture	6	2	8
Accountant	2	6	8
Social Work	0	8	8
Law Enforcement	3	3	6
Art/Commercial Art	3	3	6
Sales	3	3	6
Medical Technician	1	5	6
Medical Doctor	4	2	6
Electricity/Electronics	5	0	5
Forestry/Wildlife	3	2	5
Foods (Management)	1	4	5
Carpentry	5	-	5

Those respondents who were working full or part-time were asked what kind of job they had. The jobs listed most often, with the number shown in parentheses, were by sex:

Males		Females	
General Labor	(12)	Secretarial and General Office	(25)
Automobile Mechanic	(7)	Clerical	(18)
Military	(5)	Waitress	(14)
Nursery/Landscaping	(5)	Sales	(13)
Sales	(5)	Data Processing	(11)

Most of the jobs seem to be ones which the 1977 high school graduates could enter with a minimum or a short period of training. A person-by-person analysis would have to be made to determine if there is any relationship between the kind of job held now and the kind of job wanted in ten years.

The graduates were asked what types of assistance they would be interested in having, and Table 6-11 shows their responses. It is interesting to note that human relations skills (38.9 per cent) and communication skills (38.3 per cent) were the highest. This parallels the needs for employee job upgrading training (Table 2-10, Chapter II) and the similar responses of the general population (Table 3-14, Chapter III). Refresher mathematics was third, and job or career counseling fourth.

TABLE 6-11

Types of Assistance that Would Be of Interest
(By Per Cent of Graduates)

Type of Assistance	Male	Female	Total
Refresher Mathematics	34.3	40.5	38.0
Reading Improvement	24.8	19.5	21.6
Job or Career Counseling	29.2	41.9	36.9
Improve Technical Job Skills	28.5	17.6	21.9
Improve Secretarial Skills	1.5	25.2	15.9
Improve Communication Skills	33.6	41.4	38.3
Improve Human Relations Skills	24.8	48.1	38.9
None of These	16.1	13.3	14.4

There were 83.9 per cent of the graduates interested in a short-term, special interest topic, and their responses are shown in Table 6-12. Photography was selected most with 147 responses (42.4 per cent), automotive maintenance second with 119 (34.3 per cent), and consumer interest topics third, having 115 responses (33.1 per cent). The "other" category represented a widely varying list with no one topic predominating.

TABLE 6-12

Special Interest Topics Suggested
(By Per Cent of Graduates)

Topic	Male	Female	Total
Painting	9.5	16.2	13.5
Ceramics	5.8	23.8	16.7
Photography	38.0	45.2	42.4
Art Appreciation	10.2	5.2	7.2
Group Singing	5.8	14.8	11.2
Comtemporary Drama	6.6	11.9	9.8
Dance/Exercise	9.5	41.9	29.1
Creative Writing	13.9	19.0	17.0
Furniture Making	19.7	19.5	19.6
Home Repair	24.1	23.8	23.9
Automotive Maintenance	38.7	31.4	34.3
Women's Programs	.7	23.8	14.7
Self Defense	23.4	36.2	31.1
Interior Design	13.9	33.8	25.9
Landscape Design	24.9	17.6	20.5
Fabric & Apparel Design	2.9	18.1	12.1
Lecture Series	8.0	8.6	8.4
Consumer Interest Topics	27.0	37.1	33.1
Principles of Supervision	20.4	15.2	17.3
Principles of Management	32.1	23.8	27.1
Technical Report Writing	14.6	7.1	10.1
Gourmet Cooking	17.5	31.0	25.7
Other	18.2	22.9	21.0

In response to whether or not educational-cultural services should be available, 31.4 per cent stated "yes," and 53.3 per cent didn't know. The services or activites suggested were:

- Concerts
- Plays and Drama
- Lectures
- Discussion Groups
- Music
- Special Events
- Career Information
  - -jobs available
  - -resume writing
- Recreational Activities
- Field Trips
- Workshops

1977 Graduates' Evaluation of High School Preparation

The graduates were asked about their high school preparation in order to provide a basis for counseling, guidance and resource services needed at a community college. Table 6-13 contains their responses, by school, in regard to preparation for college. Most, 34.6 per cent, rated it as "fair, but could have been better," while 32 per cent stated "very good in some ways, could have been better in others."

TABLE 6-13

How Well High School Prepared 1977 Graduates for College
(By per cent of Graduates)

	Inadequate			Fair, Could Be Better			Very Good in Some Ways			Excellent		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
(01)	21.7	12.5	16.4	34.8	34.4	34.5	34.8	28.1	30.9	-	6.3	3.6
(02)	5.3	-	2.3	10.5	16.0	13.6	73.7	60.0	65.9	10.5	24.0	18.2
(03)	10.0	14.3	12.9	-	28.6	19.4	30.0	33.0	32.3	10.0	-	3.2
(04)	-	13.3	8.3	55.6	40.0	45.8	11.1	33.3	25.0	-	-	-
(05)	19.0	7.4	12.5	47.6	33.3	39.6	14.3	44.4	31.3	4.8	3.7	4.2
(06)	25.0	27.3	26.3	37.5	18.2	26.3	37.5	45.5	42.1	-	9.1	5.3
(07)	60.0	20.0	33.3	30.0	45.0	40.0	-	25.0	16.7	-	-	-
(08)	-	33.3	18.2	80.0	66.7	72.7	20.0	-	9.1	-	-	-
(09)	-	-	-	50.0	-	50.0	50.0	-	50.0	-	-	-
(10)	7.7	28.6	22.0	61.5	25.0	36.6	7.7	21.4	17.1	7.7	-	2.4
(11)	17.6	16.0	16.7	41.2	44.0	42.9	29.4	28.0	28.6	5.9	4.0	4.8
Totals	16.8	15.2	15.9	37.2	32.9	34.6	29.2	33.8	32.0	4.4	5.2	4.9

The 1977 graduates' responses regarding preparation for employment is contained in Table 6-14. There were 29.7 per cent stating "fair, but could have been better," and 26.2 per cent stating "very good in some ways, but could have been better in others."

TABLE 6-14

How Well High School Prepared 1977 Graduates for Employment
(By per cent of Graduates)

	Inadequate			Fair, Could Be Better			Very Good in Some Ways			Excellent		
School	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
(01)	31.8	18.8	24.1	18.2	37.5	29.6	27.3	18.8	22.2	4.5	12.5	9.3
(02)	26.3	12.0	18.2	10.5	20.0	15.9	21.1	32.0	27.3	10.5	8.0	9.1
(03)	30.0	19.0	22.6	20.0	33.3	29.0	30.0	23.8	25.8	20.0	-	6.5
(04)	22.2	20.0	20.8	11.1	20.0	16.7	44.4	46.7	45.8	-	6.7	4.2
(05)	19.0	14.8	16.7	47.6	33.3	39.6	14.3	25.9	20.8	-	7.4	4.2
(06)	25.0	-	10.5	-	18.2	10.5	50.0	45.5	47.4	-	18.2	10.5
(07)	30.0	15.0	20.0	50.0	50.0	50.0	10.0	35.0	26.7	-	-	-
(08)	20.0	16.7	18.2	60.0	66.7	63.6	20.0	-	9.1	-	-	-
(09)	-	-	-	-	-	-	-	-	-	50.0	-	50.0
(10)	7.7	14.3	12.2	46.2	32.1	36.6	23.1	21.4	22.0	7.7	7.1	7.3
(11)	29.4	28.0	28.6	17.6	24.0	21.4	23.5	32.0	28.6	5.9	[illegible]	2.4
Totals	24.1	16.7	19.6	26.3	31.9	29.7	24.1	27.7	26.2	5.8	[illegible]	6.1

In regard to the amount of help received from high school in reaching a job decision, 174 (50.1 per cent) stated, "little or no help," 108 (31.1 per cent) "some help," 21 (6.1 per cent) "considerable help," and 6 (1.7 per cent) "lots of help."

Table 6-15 shows how the graduates perceived effectiveness of their high school preparation based upon the education or training they have received since graduation. The largest group to rate it as excellent were 16.7 per cent of the students who had enrolled in vocational-technical schools. The largest to rate it as inadequate were 25 per cent of the students who had received training in business colleges.

TABLE 6-15

Perceived Effectiveness of High School Preparation for College or Other Post High School Work Based upon the Type of Training Received
(By per cent of Graduates)

Post High School Training Received	Inadequate	Fair	Very Good in Some Ways	Excellent
Have Had No Additional Training or Education	9.1	18.2	12.1	-
Business College	25.0	25.0	50.0	-
Vocational Technical School	12.5	50.0	20.8	16.7
Community College	19.2	42.4	29.6	7.2
College or University	18.1	34.6	43.3	3.9

Summary

1. Most of the 1977 high school graduates responding, 32.2 per cent, live in the Seattle area, 11 per cent in Washington, and 5.5 per cent out of state. Over one-third, 37.8 per cent, are working full-time, and 21.3 per cent are attending school full-time.

2. Since high school graduation, 42.7 per cent have received training or education at a community college, 40.1 per cent on the job, 36.7 per cent at a four-year college or university, and 6.9 per cent at a vocational-technical institute. Over half, 55.3 per cent, have attended a day school, while 20.5 per cent have attended an evening school.

3. Their most common high school curriculums were college preparatory (32.0 per cent), general (24.8 per cent), and business and office (13.8 per cent).

4. The reasons given most often by those not attending school now were working full-time (32.3 per cent) and financial reasons (16.4 per cent) with 55 of the latter 57 stating they would attend if they had more financing.

5. Over half, 51.6 per cent, think there are adequate training and educational opportunities in the area where they graduated, and 88.5 per cent stated they were now interested in further education or training. The most common areas of interest were business administration, computer science, secretarial training, and teaching, with the purposes being to prepare for a new job (by 37.2 per cent), to complete a program now in progress (17.9 per cent), self-improvement (16.4 per cent), and to improve in present job (6.9 per cent).

6. For each category of school (i.e., four-year college or university, community college, vocational-technical institute), there was a higher per cent of the 1977 high school graduates that had attended than there were 1979 seniors planning to attend.

7. There were 40.6 per cent of the respondents who planned to be in professional work in ten years, while 21 per cent planned for a semi-professional, technical or middle business occupation. Most, 62.8 per cent, have decided what kind of job they would like in ten years, with teaching listed most often (19 respondents), followed by business administration (17), and communications (16).

8. Human relation skills (38.9 per cent), and communication skills (38.3 per cent) were the most common areas in which they would like assistance. Refresher mathematics (38.0 per cent) and job or career counseling (36.9 per cent) followed.

9. Nearly all of the respondents (83.9 per cent) were interested in a short-term special-interest topic with photography most popular (42.4 per cent), automotive maintenance (34.3 per cent) second, and consumer interest topics (33.1 per cent) third.

10. About one-third of the respondents (31.4 per cent) thought that educational-cultural services should be available and suggested areas such as concerts, plays, lectures, discussion groups, and career information.

11. The respondents felt their high school did a better job preparing them for college or other post-high school work (very good in some ways by 32 per cent; and fair but could have been better, 34.6 per cent) than it did for employment (very good in some ways, 26.2 per cent; and fair but could have been better, 29.7 per cent); and half (50.1 per cent) felt they had received little or no help in reaching a job decision.

Conclusions

1. The responses of the 1977 high school graduates and the 1979 high school seniors indicated similarities in high school curriculums (general and college preparatory listed most often), and their fields of interest for further study (business administration and computer science listed most common). Both groups placed business administration and engineering high on the list of jobs they wanted in ten years, although the graduates listed teaching most often. In general, the seniors seemed to favor professional occupations more than the 1977 graduates did.

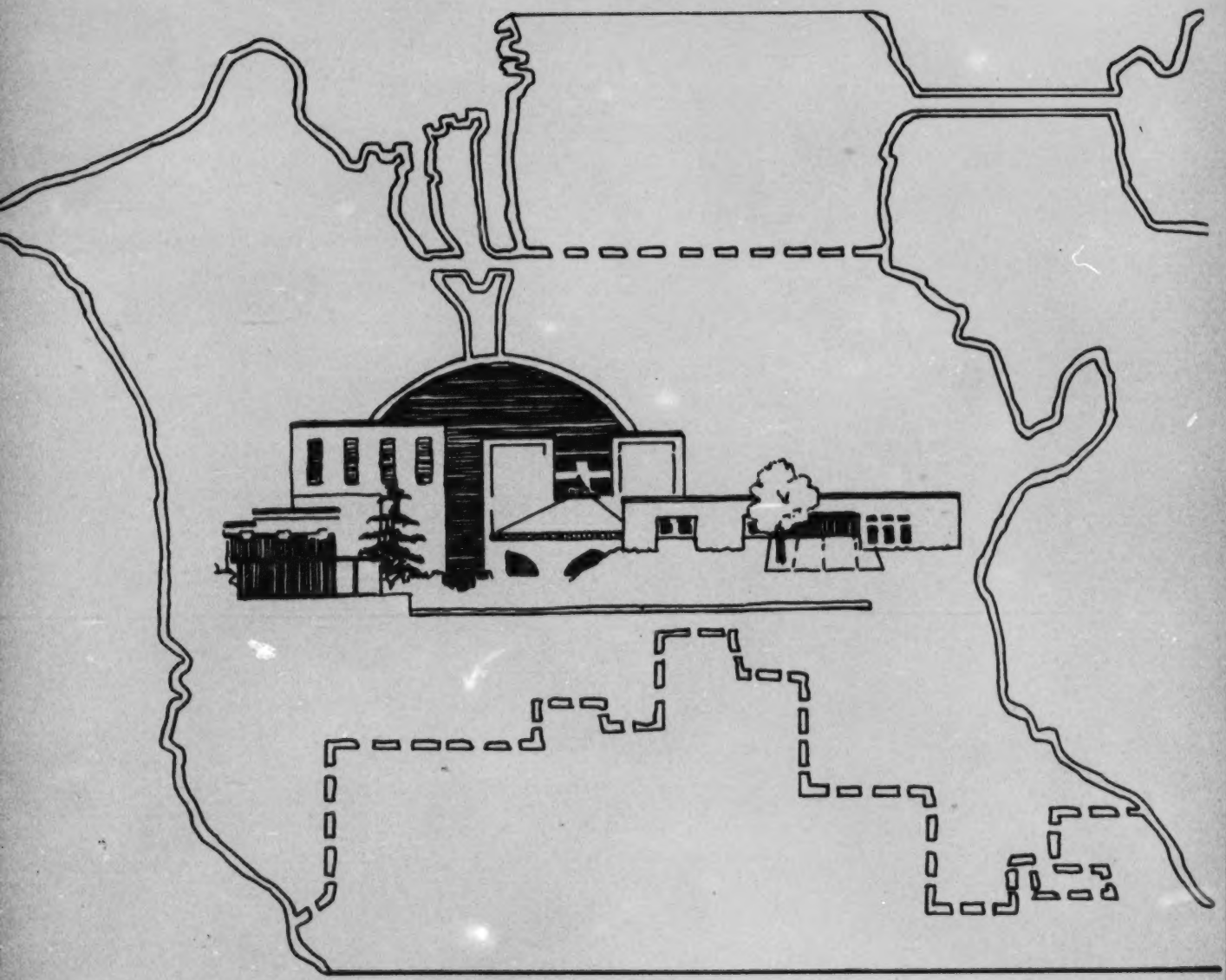
2. The 1979 seniors' perceptions of how well high school was preparing them (36.5 per cent stating "very good" or "just what I need") were very close to how well the 1977 graduates thought high school had prepared them for further education (36.9 per cent "very good" or "excellent"). There was considerable difference in their perceptions of the amount of help received in choosing an occupation, with more of the 1979 seniors thinking they had received "a lot of help, all I need" (12.9 per cent to 1.7 per cent) and more of the 1977 graduates rating it as "little or no help" (50.1 per cent to 26.5 per cent).

3. A major difference about the importance of financial assistance was noted, with only 1.39 per cent more of the 1979 seniors stating they would attend school if financial assistance were available, whereas 15 per cent of the 1977 graduates stated they would attend if they had financial assistance.

4. The major differences between the responses of the 1977 high school graduates and those of the 1979 seniors indicate the graduates have a slightly more realistic viewpoint. However, with the exception of financial assistance, the responses appear similar enough so that the same program directions could serve both groups.

5. Since 42.7 per cent of the 1977 graduates attended a community college, and 88.5 per cent of them now express interest in further education, it appears the community college will be called upon to increase services to this group. In addition, since 81.3 per cent of the 1979 seniors plan to continue their education, but only 49.2 per cent during the first year out of high school, the offering of short-term special-interest topics could help maintain contact with this group until they enroll in an established program.

SUMMARY AND CONCLUSIONS



CHAPTER VII: SUMMARY AND CONCLUSIONS

Community colleges are charged with the responsibility of providing for the educational, and to some extent cultural and recreational, needs of the communities they serve. Communities, however, are complex and their populations are composed of subgroups including the business community, older Americans, youth, the economically disadvantaged, and many others. Recognizing different groups have different needs, the needs assessment study was targeted for five subgroups within the community, each of which was sampled using an instrument that would best elicit their needs. This chapter will reiterate the major findings derived from each survey and, more importantly, relate the findings of the five surveys to each other where possible.

In way of review, the five populations surveyed were business and industry, general residential population, high school seniors, recent high school graduates, and South Seattle Community College students attending the college during the winter quarter of 1979. The geographic area of the survey was generally confined to the southern third of the city, which is the primary service area of the college.

Business and Industry

A sample of 1,663 firms was drawn from the 8,243 located in the college's service area and a portion of downtown Seattle. The sample included all firms with over 25 employees and was randomized for smaller firms. Responses were received from 490 firms resulting in an overall 29.5 per cent return. The return rate varied from a low of 7.4 per cent for businesses in South Seattle who employ five or less people to 78.4 per cent for firms employing over 100. In general, the larger the company, the more likely it was to respond. Two factors contributed to this tendency. First, the smaller firms were surveyed by mail and tended to have larger numbers of undeliverable survey forms and secondly, all businesses with 100 or more employees were surveyed by personal contact which encourages a higher rate of response. While the variations in method of contact may lead to biasing in favor of responses from larger firms, they do insure to some degree that all employees in the survey area are more evenly represented in the sample responses. As example, while there were almost one-third again as many firms responding in the 26-99 employee category as there were in the over 100 employee group, these smaller firms only represented 10,322 employees compared to 72,533 represented by firms with 100 or more employees. The total number of employees represented by the 490 responding firms was 84,759 which is approximately 19 per cent of the people employed in the city of Seattle.

Of the 84,759 employees represented by responding firms, 43,660 (51.5 per cent) were classified as technical and semi-professional--job levels for which community colleges provide training. Of these, 43,660 employees, 40 per cent were in some form of service-related occupation (finance, insurance, real estate, personnel services, public administration) and 33 per cent were in retail and wholesale trade. By sheer numbers of workers it is apparent that training of the type usually associated with business and office occupations would be highest in demand.

Employers responding to the survey were asked to state how many employees they had in each of 94 occupations ranging from accountants and bookkeepers to waiters and x-ray technicians. In addition, they were asked about the availability of qualified persons for each of the occupations, and changes in the number of employees in each job they anticipated in the foreseeable future. Relating the number of employees in each occupation to the availability of qualified people and expected changes in demand yielded a raw score for each occupation that the investigators used to estimate the occupations that would require the greatest number of qualified workers to meet business and industry needs. The procedure used was admittedly quasi-scientific and somewhat subjective but with these disclaimers, the investigators propose the need for trained personnel will be greatest for the following occupations in the near future:

Sales representatives, sales or order clerks
Secretaries, tellers, and typists
Machinists
Welders and flame cutters
Sheet metal workers
Commercial drivers
Loan underwriters and processors
Bookkeepers, accountants, and accounting clerks
General office workers
Electronic technicians
Cooks

For comparison, the top ten occupations in number of employees forcasted for 1985 in Vocational Education Planning Study for the Seattle-King County Area[1] are:

Manpower Needs - 1985

Marketing and Sales	52,042
Accounting	34,196
Secretarial Science	33,706
Commercial Driving	23,124
Agricultural Business	20,537
Waiter/Waitress	20,540
Fashion Merchandising	20,309
Commercial Cooking	19,343
Machine Shop	16,458
Business Management	15,125

There appears to be general agreement in both studies that demand will be greatest for workers trained in the distributive education and business and office occupations.

1 Vocational Education Planning Study for the Seattle-King County Area: A Collaborative Effort of the King-Snohomish Manpower Consortium, Private Industry Council, Seattle Community College District, Seattle Public Schools, and Washington State Department of Employment Security, Seattle, April, 1980.

Answers to questions directed to employers about the adequacy of education of their employees suggest there may be room for improvement in some high school general and vocational education programs. Of the 426 employers responding regarding vocational programs, 3.8 per cent stated the high schools were doing an excellent job, 29.6 per cent fair, 27 per cent poor, and 39.7 per cent responded they did not know. Regarding general education, 10.4 per cent of the respondents stated the high schools were doing an excellent job, 55.1 per cent fair, 14.6 per cent poor, and 20 per cent did not know.

While the survey did not contain questions about employer satisfaction with vocational training programs at community colleges and elsewhere, the Vocational Education Planning Study did. Their results are tabulated below:

Overall Ratings of Vocational Programs by Per Cent of Respondents

School	Excellent	Good	Fair	Adequate	Poor	Don't Know
High School	7	20	20	23	11	18
Vo-Tech	8	25	14	21	7	25
Community College	17	29	9	24	5	16
Private	6	20	8	21	8	36
CETA	4	7	13	14	19	43

When asked what kinds of training would be helpful for employee job upgrading, the following instructional areas were mentioned by employers most frequently:

Type of Training	Number of Firms Mentioning
Administration and Management	178
Operations and Management	159
Communications Skills	146
Salesmanship	136
Human Relations	134
Accounting	114
Typewriting	111
Basic Mathematics	106

The responsibility for supplemental training to meet business needs again falls primarily to the Business and Office Occupations Division. Growth opportunity in both preparatory and supplemental business and office occupations programs is most evident. With proper articulation between business personnel, training offices, and the community college, even greater growth potential exists.

Although the results overwhelmingly indicate an escalating need for increased preparatory training in distributive education and business and office occupations, the job demand for industrial workers suggests increased preparatory training will also be needed by machinists, welders and flame cutters, sheet metal workers, and electronics technicians. In the service area, greatest demand will be for cooks and commercial drivers. Conversely, occupations where future job opportunities appear to be poorest include surveyors,

landscape designers, police officers and firefighters. For a more detailed list, see appendices 9-12 for chapter 2. With increasing competition within the community college for declining instructional dollars, and with all else being equal, it would seem advisable for the college to consider, where appropriate, increasing support to instructional preparatory programs where the need is forecasted while examining further the potential of decreasing effort in those programs where the need for qualified workers suggests a decline in need.

In the area of supplemental training, the greatest number of needs noted are for increases in training for business and office occupations programs. Note, however, that most employers recognize the need for educating the undereducated adult. With increased articulation between the business community and the college, review indicates that the development center could increase its service to the working adult through additional off-hour or shared-time training.

High School Seniors

Seniors at eleven high schools from which the college enrolls most of its students were surveyed in May of 1979. Of the total of 2,460 seniors, 1,516 responded for an overall return of 61.6 per cent. Responses by individual school ranged from a low of 20.7 per cent to a high of 87.9 per cent. Because of variations used in administering the instrument, it is not possible to generalize to the population. The sample does, however, provide some interesting data.

Seniors apparently are not lazy, since 75.8 per cent of the respondents were employed while attending school. They also don't consider themselves poor since 68.5 per cent identified their family situation as comfortable or well off. Roughly, one-third of the students were enrolled in a college preparatory curriculum and another third in occupational-related curriculums.

While 81 per cent of the seniors stated they would probably continue their education after high school graduation, only half of them stated they would do so during their first year out of high school. The implication is that at least some students want a work break before continuing their education.

Students were asked which fields they would be interested in for further study after graduation and what kind of job they would like to have ten years hence. The top ten choices in each category were:

	Fields of interest For Further Study		Preferred Job Ten Years Hence
1.	Business Administration	1.	Business Administration
2.	Airline Attendent/Worker	2.	Engineering
3.	Computer Operator/Programmer	3.	Airline Worker
4.	Automotive Mechanics	4.	Computer Operator/Programmer
5.	Accounting	5.	Accountant
6.	Engineering Technology	6.	Architect
7.	Carpentry	7.	Secretary
8.	Pre-engineering	8.	Law
9.	Commercial and Fine Art	9.	Sports and Sports Related
10.	Pre-law	10.	Commercial and Fine Art

The general agreement between the two columns is to be expected, although carpentry dropped from seventh place on the first list to eighteenth on the second. Students would usually choose a field of study in which their interest was high with the hope for long-range employment in that field. The fit between high school seniors' job preferences and the job market forecasted for the Seattle area in the near future is good for those students interested in business administration, accounting and office occupations but not so promising for airline workers, architects and lawyers. Since 53 per cent of the seniors responding to the survey felt they had not received much help from the high school in choosing an occupation or making future educational plans, there may be a need to explore this facet further.

Looking at the fields of interest in terms of the extent of training needed to produce a qualified worker, 7 per cent of the students were most interested in apprenticeable trades, ten per cent in careers for which high school graduation is adequate preparation, 47 per cent in occupations requiring an additional two years of study beyond high school, and 36 per cent in occupations usually requiring four-year college or university training. Since 34 per cent of the seniors expressed interest in attending a two-year school and an equal number stated they would like to attend a four-year school, the match between occupational choice and intention to participate in further education seems reasonable. As previously noted, however, this generalization cannot be suggested with any degree of certainty until the job choice and interest in continued education for each student, on a student by student basis, is compared. Projecting the generalization farther, it seems reasonable to suggest the community college can expect to enroll approximately one-third of the high school graduates in occupational programs and another 10 to 20 per cent in the transfer curriculum.

Senior responses as to how well high school was preparing them for their future showed 10 per cent were very well satisfied, 26 per cent believed the preparation good, 32 per cent fair, and 18 per cent responded they were not well prepared for the future. The dissatisfaction with high school preparation was significantly greater among students who did not plan to continue their education.

1977 High School Graduates

1977 high school graduates from the eleven high schools were surveyed. The expectation was that these individuals, now out of high school for two years, could relate to the "real world" more closely than the high school seniors but would still have keen perceptions of their high school experience. A sample of 889 of the 2,556 1977 graduates was selected and responses were received from 39 per cent of them. Once again, errors in sampling precluded statistical analysis of the data. Two high schools wanted all 1977 graduates surveyed. Other samples ranged from 25 to 33 per cent. Follow-up procedures varied as did the method of contact of the schools with their graduates.

The 1977 graduates generally identified with the same high school curriculums in the same proportion as the high school seniors--one-fourth in general curriculum, one-third in college preparatory, and one-fifth in business and

office and distributive education. Approximately half of the 1979 seniors stated they would attend a postsecondary school during their first year after high school graduation. Twenty-four per cent of the 1977 graduates were actually continuing their formal education during their second year after graduation. Twenty-four per cent of the seniors stated they would work full time after graduation whereas 38 per cent of the 1977 graduates were working full-time in 1979, suggesting a slight shift from those who hope to attend college toward full-time work when seniors actually do complete the high school education. Of the 1977 graduates who did attend college, the choice of school very closely parallels the choices suggested by 1979 seniors, suggesting students who state they will attend a certain university or college tend to do so.

Long range employment aspirations of high school seniors are toward jobs that require two years of education past high school (47 per cent of the respondents) or a four-year college degree or more (36 per cent). Long range aspirations of 1977 graduates somewhat parallel the seniors with 21 per cent expressing interest in semi-professional/technical jobs and 41 per cent in professional occupations. Jobs generally held by the 1977 graduates were, however, usually of the type requiring little education beyond high school, which is to be expected for people only two years beyond high school graduation. To meet their expectations, many will need to participate in continuing education either by taking advantage of off-hour training or by temporarily leaving work to enroll in a postsecondary educational program on a full-time basis.

South Seattle Community College Students

A survey of South Seattle Community College students during the winter quarter of 1979 yielded 1,182 responses representing 20.7 per cent of the day students and 12.9 per cent of the evening students. The method of sampling led to some biasing in favor of full-time day occupational preparatory and part-time evening supervision and management students. Because of this, data is reported where possible by instructional division rather than as college totals.

Students in the aviation, motor vehicle maintenance, technical education, horticulture, and hospitality and food sciences seemed committed to completing a certificate or degree program at the college with more than 74 per cent of the respondents in each division stating they would complete their program of study. The percentages were less in business and office (57.6), college transfer (55.4), and supervision and management (61.2), but this could be due to the larger number of part-time and evening students sampled in these three divisions. Overall, the commitment to complete a program was high.

In answering a question asking if the students would enroll at the college if making the choice again, the response was very favorable across all divisions with an average of 81.8 per cent stating they would. When asked how well the college was preparing them for their future, unsatisfactory responses ("not very well" or "fair, could be better") ranged from a low of 5.1 per cent in the horticulture division to a high of 28.8 in aviation maintenance.

It is interesting to note that 70 per cent of the South Seattle Community College students responding to the survey were in occupational programs, most of them day preparatory programs. Of these, 31 per cent state they hope to earn a bachelors degree or higher sometime during the next ten years. Twelve per cent hope to transfer to a four-year institution immediately after completing their program at South Seattle Community College.

Since the training they receive at the college is usually considered terminal leading directly to employment, the high interest in continued college training suggests the community college program in which they enroll may only be ancillary to the position they wish to hold some years hence. As example, students in the aviation program, 38 per cent of whom hope to complete a bachelors degree or more, may hope to prepare for a business career in aviation, rather than one as a mechanic. As further evidence of the students high employment aspirations, 79.2 per cent of all South Seattle Community College students hope to secure professional/managerial positions whereas only 2.3 per cent express an interest in continued employment in the semi-skilled or skilled worker occupations. It would seem advisable to probe the reasons why so many occupational students desire more than a two-year college education. It is possible that more business and general education courses may be warranted for students in occupational curriculums.

Residential Community

The service area of South Seattle Community College embraces approximately 57,665 housing units and a population of 160,575 people. The service area was divided into nine subregions, six of which covered the entire college service area and three of which were confined to public housing centers. One thousand one hundred and twenty-seven personal interviews were conducted; 930 in subregions one through six for a 1.7 per cent sample, and 197 in the three public housing areas for a 10.1 per cent sample. One adult member of each household was interviewed and demographics of the sample suggest no biasing by age or sex of the respondents.

One notes that 23.6 per cent of those interviewed did not complete high school. Generalizing to the total population suggests a substantial need for G.E.D. training and adult high school completion courses, particularly in the Rainier Valley section of South Seattle. With a high proportion of undereducated adults in this part of the city, a satellite campus in the Rainier Valley, if financially feasible, could meet the initial educational needs of many people.

Approximately half of the respondents (47.9 per cent) had taken part in some form of adult education after leaving school which may be somewhat below the national level suggested by some to be closer to 60 per cent. Few suggestions were elicited from the respondents for educational/cultural/recreational activities not now available that should be made available.

Visibility of the community college to its public has been a concern for college administrators who believe it imperative the public be well informed about its community college and programs it provides. When asked if they had either visited or attended South Seattle Community College, 38.5 per cent of all respondents stated they had. The percentages ranged from a high

of 58.6 per cent of respondents residing in the High Point Housing Center who had been on the South Seattle Community College campus to a low of 20.4 per cent in subregions more distant to the campus. Overall, however, this relatively high percent suggests members of the community are indeed aware of the college, and hopefully its programs and services.

As noted in the conclusions to chapter three, the data gathered from the residential community suggests potential for increasing occupational supplemental training, particularly in the areas of management, business administration, and human relations. When considered in light of responses received from business and industry, the potential becomes even more apparent.

Future Implications

The data derived from the residential community and the other four surveys is extensive. Approximately 4,660 responses were received, each containing a considerable amount of information. In the months ahead, the investigators hope to seek additional relationships not reported herein. In particular, they hope to undertake a multiple correlation study to determine what relationships may exist between an individual's age, sex, level of education, program of study in high school and college, current job held, and aspirations for the future. Until this is done, the investigators sincerely hope the material included in this document will be of practical value to college administrators and citizens responsible for planning for the college's future.

APPENDIX

Number of Business-Industry Firms
(By size and zip code area)

Area	1-5	6-25	26-99	100 & Over	Total
Downtown					
98101	1,603	512	131	45	2,293
98104	1,104	383	92	33	1,616
98121	396	220	59	16	692
Subtotal	3,103	1,115	282	94	4,601
South Seattle					
98106	147	47	22	8	224
98108	465	302	100	25	892
98116	280	64	11	0	355
98118	285	91	13	3	392
98126	127	50	13	2	192
98134	305	270	122	35	737
98136	82	6	1	0	89
98144	217	102	25	16	358
98146	82	28	5	0	115
98168	141	30	19	1	191
98178	85	18	4	0	107
Subtotal	2,216	1,008	335	90	3,652
Grand Total	5,319	2,123	617	184	8,243

South Seattle Community College

6000 Sixteenth Avenue S.W. • Seattle, Wa 98106 • Area Code 206-764-5300

Jerry M. Brockey, *President*

May 21, 1979

South Seattle Community College is conducting a study to learn more about the employee training needs of business and industry. The results will be used to develop instructional programs that will serve business and industry more effectively.

Will you assist by providing the requested information relative to your firm? Your responses, along with those of other firms being surveyed, will provide an important base for program planning. In effect, it is an opportunity for you to have a voice in determining what training becomes available.

The enclosed survey form is set up to learn what jobs your firm has at the technical and semi-professional levels, the supply of qualified workers available now, and your anticipated future needs. It also provides for information about the training needs of your present employees.

The form is designed to facilitate your providing the information requested. It is coded in the upper left corner for tabulation purposes. All information will be handled as confidential and your firm will not be identified. A return addressed, stamped envelope is enclosed for your convenience in responding. Would you complete and return it by _____?

This study is under the direction of Dr. John M. Chrismer, a member of our staff. You can reach him at 764-5827 if you have any questions or comments.

Thank you for your assistance and cooperation. It will help your community college to better meet your educational and occupational training needs.

Sincerely,

Jerry M. Brockey
President

JMB:pt
Enclosures

SEATTLE COMMUNITY COLLEGE DISTRICT
Dr. John W. Casey, *Chancellor*

BOARD OF TRUSTEES: Helen Sutton, *Chairman* • Art Siegal, *Vice-Chairman* • Daniel V. Carbone • Aurelia del Fierro • Marvin E. Glass

NORTH SEATTLE COMMUNITY COLLEGE • Cecil Baxter, Jr., *President*
SEATTLE CENTRAL COMMUNITY COLLEGE • Robert Terry, *President*
SOUTH SEATTLE COMMUNITY COLLEGE • Jerry M. Brockey, *President*

BUSINESS AND INDUSTRY INFORMATION

A study to learn about the employee training needs of Business and Industry is being conducted by South Seattle Community College. The results will be used toward the development of future instructional programs.

You are requested to provide the information called for in this survey form. Your responses, along with those of other firms being surveyed, will provide an essential part for successful program planning.

Thank you for your assistance.

South Seattle Community College

(Business Code)

CONFIDENTIAL

BUSINESS AND INDUSTRY SURVEY
South Seattle Community College
6000 Sixteenth Avenue S.W.
Seattle, Washington 98106

Introduction: The purpose of this survey is to learn the present and anticipated future job needs of employers for persons trained in the technical and semi-professional categories. These categories commonly require preparation beyond the high school level but less than the 4-year college degree.

Your response will be treated as confidential. The business code in the upper left hand corner is for tabulation purposes. The only identification of your firm will be as one that cooperated in the study.

Part I: GENERAL INFORMATION

Name of Firm _____ *Phone* _____

Address _____

Person Reporting _____ *Position* _____

Total No. of Employees _____ *No. of Technical and Semi-Professional Employees* _____

Part II: TECHNICAL AND SEMI-PROFESSIONAL JOB INFORMATION

The types of employees commonly found in the business, industrial, service, and health care occupational areas are listed in Column I below and on the following pages. Please add any other technical or semi-professional jobs for which you have employees in the spaces provided following each area.

For each type of employee in your firm, you are asked to provide the information requested in Columns II, III and IV.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
A. BUSINESS WORKERS								
1. Auditors & Accountants					1.			
2. Bookkeepers					2.			
3. Credit Persons					3.			
4. Purchasing Agents					4.			
5. Secretaries					5.			
6. Stenographers					6.			
7. Machine Transcribers					7.			

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
A. BUSINESS WORKERS, (cont.)								
8. Typists					8.			
9. File Clerks					9.			
10. Receptionists, Host Persons					10.			
11. Word Processors					11.			
12. Computer Programmers					12.			
13. Computer Operators					13.			
14. Data Entry Operators					14.			
15. Office Machine Operators					15.			
16. Sales Representatives					16.			
17. Sales or Order Clerks					17.			
18. Receiving/Warehouse Clerks					18.			
19. Advertising or Display Persons					19.			
20. Supervisors					20.			
21. Managers or Dept. Heads					21.			
A. OTHER BUSINESS WORKERS (Write In)*								
22.					22.			
23.					23.			
24.					24.			
25.					25.			
26.					26.			
27.					27.			
28.					28.			
B. INDUSTRIAL WORKERS								
1. Draftspersons					1.			
2. Machinists					2.			
3. Power Station Operators					3.			
4. Welders & Flame Cutters					4.			
5. Foremen, Shop					5.			
6. Inspectors, Shop					6.			
7. Sheet Metal Workers					7.			
8. Mill Wrights					8.			
9. Electrotypers & Stereotypers					9.			
10. Die Setters					10.			

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
B. INDUSTRIAL WORKERS, (cont.)		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
11. Die Makers					11.			
12. Die Designers					12.			
13. Lay-out Persons					13.			
14. Structural Steel Fabricators					14.			
15. Technicians, Electronic					15.			
16. Technicians, Electro-Mechanical					16.			
17. Technicians, Chemical Engineering					17.			
18. Technicians, Laboratory					18.			
19. Technicians, Civil Engineering					19.			
20. Technicians, Mechanical Engineering					20.			
21. Technicians, Mechanical Systems Design					21.			
22. Technicians, Metallurgical					22.			
23. Technicians, Quality Control					23.			
24. Technicians, Surveying					24.			
25. Technicians, Instru-mentation					25.			
26. Mechanics, Motor Vehicle					26.			
27. Mechanics, Heavy Equip. & Diesel					27.			
28. Mechanics, Aircraft, A&P					28.			
29. Mechanics, Aircraft Production					29.			
30. Mechanics, Aircraft Unlicensed					30.			
31. Mechanics, Avionic Production					31.			
32. Mechanics, Refrig/Air Conditioning					32.			
33. Mechanics, Radio & T.V.					33.			
34. Mechanics, Office Machine					34.			
35. Photoengravers & Lithographers					35.			
36. Engravers, Except Photo-engravers					36.			
37. Compositors & Typesetters					37.			
38. Foundry Practices					38.			

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
B. INDUSTRIAL WORKERS, (cont.)		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
39. Tool Makers					39.			
B. OTHER INDUSTRIAL WORKERS (Write In)*								
40.					40.			
41.					41.			
42.					42.			
43.					43.			
44.					44			
45.					45.			
46.					46.			
47.					47.			
C. SERVICE WORKERS								
1. Barbers & Beauty Operators					1.			
2. Entertainers					2.			
3. Social Service Workers					3.			
4. Firemen & Firewomen					4.			
5. Police Officers					5.			
6. Legal Technicians					6.			
7. Automotive Repair					7.			
8. Diesel & Heavy Equipment Repair					8.			
9. Aircraft Repair, A&P					9.			
10. Aircraft Repair, Production					10.			
11. Aircraft Repair, Unlicensed					11.			
12. Avionic Repair					12.			
13. Cooks					13.			
14. Bakers					14.			
15. Waiters/Waitresses					15.			
16. Host/Hostess					16.			
17. Beverage Personnel					17.			
18. Food Service Management					18.			
19. Food Dispensing Equipment Technician					19.			
20. Landscape Maintenance					20.			
21. Landscape Design					21.			
22. Floristry					22.			

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
C. OTHER SERVICE WORKERS *(Write In.)**								
23.					23.			
24.					24.			
25.					25.			
26.					26.			
27.					27.			
28.					28.			
29.					29.			
30.					30.			
D. HEALTH CARE WORKERS								
1. Dental Hygienists					1.			
2. Dental Assistants					2.			
3. Nursing (Practical)					3.			
4. Nursing (Registered)					4.			
5. Medical Records Librarian					5.			
6. Medical Office Assistant					6.			
7. Ward Clerk					7.			
8. Respiratory Therapist					8.			
9. Dental Laboratory Technician					9.			
10. X-Ray Technician					10.			
11. Surgical Technician					11.			
12. Para-Medical Technician					12.			
D. OTHER HEALTH CARE WORKERS *(Write In)**								
13.					13.			
14.					14.			
15.					15.			
16.					16.			
17.					17.			
18.					18.			
19.					19.			
20.					20.			

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

Part III: EMPLOYEES IN-SERVICE JOB TRAINING INFORMATION

_____ 1. *Does your firm have an organized training program for its technical and semi-professional employees?*
(1) YES (2) NO

2. *If "yes," list each type such as Orientation, On-The-Job, Promotion, Apprenticeship.*

_____ _____

_____ _____

_____ _____

_____ 3. *Are there any types of post-high school training opportunities (technical and semi-professional categories) not now available to your firm that could assist in providing your firm with better qualified employees or upgrade employes performance if offered?*

(1) Yes
(2) No
(3) Don't Know

4. *Check all the kinds of training listed below that you think would be helpful to your employees for job upgrading purposes. Please list any additional ones in the spaces provided under "other".*

AIR CONDITIONING & REFRIGERATION

_____ 1. Theory
_____ 2. Equipment Servicing

BLUEPRINT READING

_____ 3. Machine Drawings
_____ 4. Automation Equipment Layouts
_____ 5. Electrical/Electronic Circuits
_____ 6. Jigs and Fixtures
_____ 7. Sheet Metal
_____ 8. Fluidics
_____ 9. Structural Steel & Concrete

MECHANICS

_____ 10. Automotive Service Testing
_____ 11. Heavy Equipment & Diesel Repair
_____ 12. Fuel and Injection
_____ 13. Aircraft Repair, A&P
_____ 14. Aircraft Production
_____ 15. Automotive Repair

WELDING

_____ 16. Basic
_____ 17. Technology

MATHEMATICS

_____ 18. Basic
_____ 19. Geometry & Trigonometry
_____ 20. Metrics
_____ 21. Applied Business
_____ 22. Mechanics
_____ 23. Calculator

SUPERVISORY TRAINING

_____ 24. Foreman
_____ 25. Administrative & Management

DRAFTING

_____ 26. Elementary
_____ 27. Mechanical, Architectural & Civil
_____ 28. Detailing, Machine & Tool
_____ 29. Descriptive Geometry
_____ 30. Design, Machine & Tool

ELECTRICITY

_____ 31. DC & AC Fundamentals
_____ 32. Transformers, Alternators, Controllers
_____ 33. Electrical Equipment Maintenance
_____ 34. Electric Control Devices
_____ 35. Tubes & Transistor Circuits
_____ 36. Electronic Equipment Service
_____ 37. Thermometry and Pyrometry
_____ 38. Basic Electronics
_____ 39. Instrumentation
_____ 40. Computer Servicing
_____ 41. Computer Sciences

HYDRAULICS

_____ 42. Fundamentals
_____ 43. Pumps, Valves, Controls
_____ 44. Circuits
_____ 45. Equipment Maintenance

BUSINESS

_____ 46. Operations & Management
_____ 47. Marketing
_____ 48. Salesmanship
_____ 49. Color, Line & Deisgn
_____ 50. Advertising & Display

BUSINESS, cont.

_____ 51. Real Estate
_____ 52. Finance
_____ 53. Money & Banking
_____ 54. Insurance
_____ 55. Investments
_____ 56. Economics of Business
_____ 57. Statistics
_____ 58. Communications (Grammar, Speech, etc.)
_____ 59. Report Writing
_____ 60. Data Processing & Programming
_____ 61. Data Entry Operations
_____ 62. Business Methods & Systems
_____ 63. Accounting
_____ 64. Word Processing
_____ 65. Machines Operations
_____ 66. Shorthand
_____ 67. Machine Transcription
_____ 68. Typewriting

GENERAL

_____ 69. Human Relations
_____ 70. Communications Skills
_____ 71. Personal Economics

OTHER

_____ 72. Food Production Management
_____ 73. Beverage Operation Management
_____ 74. Landscape Design

(Write in others)

_____ 75. _____
_____ 76. _____
_____ 77. _____
_____ 78. _____
_____ 79. _____
_____ 80. _____
_____ 81. _____
_____ 82. _____
_____ 83. _____
_____ 84. _____
_____ 85. _____

_____ 5. Could employees with two years of training beyond high school adequately perform some of the jobs 4-year college graduates in your firm are now doing?

(1) Yes (2) No (3) Don't know

_____ 6. If "yes," please estimate the percentages by checking one of the following:

(1) 0-10%
(2) 10-30%
(3) 30-50%
(4) Over 50%

_____ 7. To what extent do the high school vocational programs in the Puget Sound area meet your job training needs?

(1) Excellent (2) Fair (3) Poor (4) Don't know

_____ 8. To what extent do the existing educational institutions (including high schools) in the Puget Sound area meet the general education needs of your employees and their families?

(1) Excellent (2) Fair (3) Poor (4) Don't know

_____ 9. How important do you believe it is to have appropriate types of training programs organized for employees who lack or have had inadequate basic training?

(1) Very important (2) Fairly important (3) Unimportant

THANK YOU FOR YOUR ASSISTANCE

South Seattle Community College

6000 Sixteenth Avenue S.W. • Seattle, Wa 98106 • Area Code 206-764-5300

Jerry M. Brockey, *President*

June 27, 1979

You will remember receiving my letter a few weeks ago in regard to the Business/Industry study that South Seattle Community College is conducting. Its purpose is to learn more about the employee training needs of Business and Industry. The results will provide an important base for the development of instructional programs.

Another copy of the information form and a postage-paid return envelope are enclosed. If you have already returned the form, please discard this. If not, would you complete and return it by _____?

Even though some of the jobs listed may not apply to your specific situation, or you may feel that you have a small number of employees, your response is important to the study. Space is provided to list additional jobs that your firm may have. Remember, your responses will be handled as confidential and your firm will not be identified. Do not hesitate to contact Dr. John M. Chrismer, 764-5827, if you have any questions. He is the member of our staff who is coordinating this study.

We will greatly appreciate receiving this information from you. It provides you an opportunity to have a voice in the planning of training programs and it will help your community college to better meet your occupational training needs.

Sincerely,

Jerry M. Brockey
President

JMB:ak
Enclosures

SEATTLE COMMUNITY COLLEGE DISTRICT
Dr. John W. Casey, *Chancellor*

BOARD OF TRUSTEES: Helen Sutton, *Chairman* • Art Siegal, *Vice-Chairman* • Daniel V. Carbone • Aurelia del Fierro • Marvin E. Glass

NORTH SEATTLE COMMUNITY COLLEGE • SEATTLE CENTRAL COMMUNITY COLLEGE • SOUTH SEATTLE COMMUNITY COLLEGE

Cecil Baxter, Jr., *President* Robert Terry, *President* Jerry M. Brockey, *President*

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average Number of Workers 01	(III) Supply				(IV) Expected Changes			
		08 Number of Firms	10 Per Cent Surplus	11 Per Cent Scarce	14 Supply Index	09 Number of Firms	12 Per Cent Increase	13 Per Cent Decrease	15 Change Index
A. BUSINESS WORKERS									
1. *Auditors & Accountants*	821	208	6.25	11.06	4.81	196	13.78	2.04	11.73
2. *Bookkeepers*	957	313	1.60	15.02	13.42	291	13.75	3.09	10.65
3. *Credit Persons*	840	138	1.45	20.29	18.84	128	9.38	1.56	7.81
4. *Purchasing Agents*	568	192	3.13	16.67	13.54	183	9.84	2.73	7.10
5. *Secretaries*	1908	309	2.59	28.80	26.21	305	20.98	2.30	18.69
6. *Stenographers*	203	57	3.51	28.07	24.56	58	17.24	6.90	10.34
7. *Machine Transcribers*	145	51	3.92	47.06	43.14	53	13.21	5.66	7.55
8. *Typists*	1285	148	6.08	29.05	22.97	138	25.36	2.90	22.46
9. *File Clerks*	721	149	12.08	10.07	2.01	140	8.57	2.86	5.71
10. *Receptionists, Host Persons*	529	191	8.38	14.14	5.76	177	4.52	3.39	1.13
11. *Word Processors*	142	55	1.82	58.18	56.36	53	45.28	1.89	43.40
12. *Computer Programmers*	265	64	0.00	43.75	43.75	60	20.0	3.33	16.67
13. *Computer Operators*	270	100	0.00	35.00	35.00	94	15.96	3.19	12.77
14. *Data Entry Operators*	446	104	5.77	35.58	29.81	99	21.21	3.03	18.18
15. *Office Machine Operators*	373	71	4.23	15.49	11.27	66	7.58	3.03	4.55
16. *Sales Representatives*	1623	186	4.84	29.57	24.73	178	26.97	1.12	25.84
17. *Sales or Order Clerks*	5498	139	2.88	23.02	20.14	129	19.38	3.10	16.28
18. *Receiving/Warehouse Clerks*	1136	163	11.04	9.20	1.84	148	10.14	1.35	8.78
19. *Advertising or Display Persons*	253	44	13.64	13.64	0.00	40	15.00	12.50	2.50
20. *Supervisors*	3247	206	1.94	23.79	21.84	185	17.84	1.62	16.22
21. *Managers or Dept. Heads*	2901	277	1.44	23.47	22.02	275	12.73	2.91	9.82
A. OTHER BUSINESS WORKERS *(Write In)**									
22. Office, General	1501	46	6.52	21.74	15.22	42	14.29	2.38	11.90
23. Accounting Clerk	60	13	0.00	23.08	23.08	13	23.08	7.69	15.38
24. Loans, Underwriters and Processors	245	16	0.00	81.25	81.25	11	81.82	0.00	81.82
25. Claims, Technician	41	10	0.00	30.00	30.00	9	55.56	0.00	55.56
26. Teller	657	9	0.00	77.78	77.78	8	50.00	0.00	50.00
27. Grocery Checker	34	3	0.00	33.33	33.33	3	0.00	0.00	0.00
28.									

(I) *Jobs for which persons are employed as technicians or semi-professional workers at this location.* B. INDUSTRIAL WORKERS	(II) Average Number of Workers 01	(III) Supply 08 Number of Firms	10 Per Cent Surplus	11 Per Cent Scarce	14 Supply Index	(IV) Expected Changes 09 Number of Firms	12 Per Cent Increase	13 Per Cent Decrease	15 Change Index
1. *Draftspersons*	284	56	3.57	50.00	46.43	54	40.74	5.56	35.19
2. *Machinists*	1086	59	1.69	62.71	61.02	58	44.83	5.17	39.66
3. *Power Station Operators*	155	6	0.00	50.00	50.00	7	28.57	14.29	14.29
4. *Welders & Flame Cutters*	778	42	2.38	42.86	40.48	45	40.00	4.44	35.56
5. *Foremen, Shop*	375	86	0.00	46.51	46.51	78	16.67	5.13	11.54
6. *Inspectors, Shop*	176	32	0.00	50.00	50.00	31	45.16	6.45	38.71
7. *Sheet Metal Workers*	632	28	0.00	60.71	60.71	28	46.43	7.14	39.29
8. *Mill Wrights*	115	12	0.00	75.00	75.00	13	30.77	15.38	15.38
9. *Electrotypers & Stereotypers*	4	4	50.00	0.00	50.00	4	0.00	25.00	25.00
10. *Die Setters*	11	4	0.00	25.00	25.00	5	20.00	20.00	0.00
11. *Die Makers*	29	9	0.00	44.44	44.44	10	10.00	0.00	10.00
12. *Die Designers*	5	3	0.00	33.33	33.33	4	25.00	0.00	25.00
13. *Lay-out Persons*	31	15	0.00	66.67	66.67	13	38.46	0.00	38.46
14. *Structural Steel Fabricators*	412	10	0.00	70.00	70.00	9	33.33	11.11	22.22
15. *Technicians, Electronic*	389	25	0.00	56.00	56.00	30	43.33	3.33	40.00
16. *Technicians, Electro-Mechanical*	102	15	0.00	53.33	53.33	14	42.86	0.00	42.86
17. *Technicians, Chemical Engineering*	32	6	0.00	50.00	50.00	6	16.67	16.67	0.00
18. *Technicians, Laboratory*	244	16	0.00	31.25	31.25	18	38.89	0.00	38.89
19. *Technicians, Civil Engineering*	122	7	0.00	28.57	28.57	8	25.00	12.50	12.50
20. *Technicians, Mechanical Engineering*	61	15	0.00	46.67	46.67	15	26.67	6.67	20.00
21. *Technicians, Mechanical Systems Design*	2	3	0.00	33.33	33.33	2	50.00	0.00	50.00
22. *Technicians, Metallurgical*	11	4	0.00	0.00	0.00	4	25.00	0.00	25.00
23. *Technicians, Quality Control*	85	20	0.00	35.00	35.00	20	15.00	5.00	10.00
24. *Technicians, Surveying*	41	4	0.00	0.00	0.00	4	0.00	0.00	0.00
25. *Technicians, Instrumentation*	29	7	0.00	42.86	42.86	7	28.57	0.00	28.57

(I) *Jobs for which persons are employed as technicians or semi-professional workers at this location.*	(II) Average Number of Workers 01	(III) Supply 08 Number of Firms	10 Per Cent Surplus	11 Per Cent Scarce	14 Supply Index	(IV) Expected Changes 09 Number of Firms	12 Per Cent Increase	13 Per Cent Decrease	15 Change Index
B. INDUSTRIAL WORKERS, (cont.)									
26. *Mechanics, Motor Vehicle*	249	30	0.00	46.67	46.67	30	33.33	0.00	33.33
27. *Mechanics, Heavy Equip. & Diesel*	335	31	0.00	58.06	58.06	32	34.38	3.13	31.25
28. *Mechanics, Aircraft, A&P*	117	3	0.00	66.67	66.67	4	50.00	0.00	50.00
29. *Mechanics, Aircraft Production*	1	1	0.00	100.00	100.00	1	0.00	0.00	0.00
30. *Mechanics, Aircraft Unlicensed*	1	1	0.00	0.00	0.00	1	0.00	0.00	0.00
31. *Mechanics, Avionic Production*	0	0	0.00	0.00	0.00	0	0.00	0.00	0.00
32. *Mechanics, Refrig/Air Conditioning*	180	19	0.00	68.42	68.42	18	50.00	0.00	50.00
33. *Mechanics, Radio & T.V.*	2	2	0.00	50.00	50.00	1	0.00	0.00	0.00
34. *Mechanics, Office Machine*	1	1	0.00	0.00	0.00	1	0.00	0.00	0.00
35. *Photoengravers & Lithographers*	6	5	0.00	0.00	0.00	5	40.00	0.00	40.00
36. *Engravers, Except Photo-engravers*	2	1	0.00	0.00	0.00	1	0.00	100.00	100.00
37. *Compositors & Typesetters*	35	6	0.00	33.33	33.33	6	66.67	33.33	33.33
38. *Foundry Practices*	136	6	0.00	50.00	50.00	6	16.67	0.00	16.67
39. *Tool Makers*	62	9	0.00	77.78	77.78	9	66.67	22.22	44.44
B. OTHER INDUSTRIAL WORKERS *(Write In)**									
40. Auto Painters	20	2	0.00	100.00	100.00	2	50.00	0.00	50.00
41. Jewelry, Design & Set	21	2	0.00	100.00	100.00	2	0.00	0.00	0.00
42. Truck Body, Production									
43. and Repair	19	2	0.00	100.00	100.00	2	100.00	0.00	100.00
44.									
45.									
46.									
47.									

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average Number of Workers 01	(III) Supply 08 Number of Firms	10 Per Cent Surplus	11 Per Cent Scarce	14 Supply Index	(IV) Expected Changes 09 Number of Firms	12 Per Cent Increase	13 Per Cent Decrease	15 Change Index
C. SERVICE WORKERS									
1. *Barbers & Beauty Operators*	77	9	22.22	22.22	0.00	7	14.29	0.00	14.29
2. *Entertainers*	73	8	12.50	0.00	12.50	7	0.00	14.29	14.29
3. *Social Service Workers*	145	14	35.71	0.00	35.71	11	9.09	0.00	9.09
4. *Firemen & Firewomen*	640	2	100.00	0.00	100.00	1	0.00	0.00	0.00
5. *Police Officers*	1120	8	12.50	0.00	12.50	11	36.36	18.18	18.18
6. *Legal Technicians*	35	7	28.57	14.29	14.29	8	25.00	12.50	12.50
7. *Automotive Repair*	74	12	0.00	58.33	58.33	12	41.67	8.33	33.33
8. *Diesel & Heavy Equipment Repair*	163	13	0.00	76.92	76.92	10	50.00	0.00	50.00
9. *Aircraft Repair, A&P*	114	3	0.00	66.67	66.67	3	66.67	0.00	66.67
10. *Aircraft Repair, Production*	0	0	0.00	0.00	0.00	0	0.00	0.00	0.00
11. *Aircraft Repair, Unlicensed*	0	0	0.00	0.00	0.00	0	0.00	0.00	0.00
12. *Avionic Repair*	0	0	0.00	0.00	0.00	0	0.00	0.00	0.00
13. *Cooks*	565	51	1.96	43.14	41.18	47	25.53	4.26	21.28
14. *Bakers*	134	8	0.00	75.00	75.00	14	28.57	7.14	21.43
15. *Waiters/Waitresses*	1214	31	19.35	25.81	6.45	31	19.35	12.90	6.45
16. *Host/Hostess*	742	29	6.90	17.24	10.34	28	14.29	17.86	3.57
17. *Beverage Personnel*	318	25	8.00	32.00	24.00	24	25.00	4.17	20.83
18. *Food Service Management*	224	36	0.00	38.89	38.89	35	22.86	8.57	14.29
19. *Food Dispensing Equipment Technician*	28	4	0.00	50.00	50.00	4	0.00	0.00	0.00
20. *Landscape Maintenance*	55	7	14.29	14.29	0.00	7	28.57	0.00	28.57
21. *Landscape Design*	4	3	0.00	0.00	0.00	3	0.00	0.00	0.00
22. *Floristry*	4	2	0.00	0.00	0.00	2	0.00	50.00	50.00
C. OTHER SERVICE WORKERS *(Write In.)**									
23. Custodians	328	40	5.00	15.00	10.00	38	15.79	0.00	15.79
24. Maintenance Persons	248	18	0.00	44.44	44.44	25	32.00	4.00	28.00
25. Truck/Bus Drivers	1366	16	12.50	18.75	6.25	15	20.00	0.00	20.00
26. Auto Parts Persons	19	4	0.00	25.00	25.00	4	0.00	25.00	25.00

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average Number of Workers 01	(III) Supply				(IV) Expected Changes			
		08 Number of Firms	10 Per Cent Surplus	11 Per Cent Scarce	14 Supply Index	09 Number of Firms	12 Per Cent Increase	13 Per Cent Decrease	15 Change Index
D. HEALTH CARE WORKERS									
1. *Dental Hygienists*	15	7	0.00	28.57	28.57	6	83.33	0.00	83.33
2. *Dental Assistants*	31	7	0.00	14.29	14.29	6	33.33	0.00	33.33
3. *Nursing (Practical)*	264	16	0.00	62.50	62.50	17	35.29	11.76	23.53
4. *Nursing (Registered)*	983	20	15.00	35.00	20.00	19	26.32	5.26	21.05
5. *Medical Records Librarian*	122	14	0.00	35.71	35.71	13	38.46	0.00	38.46
6. *Medical Office Assistant*	129	7	14.29	14.29	0.00	6	50.00	0.00	50.00
7. *Ward Clerk*	102	9	0.00	66.67	66.67	8	25.00	12.50	12.50
8. *Respiratory Therapist*	56	8	0.00	50.00	50.00	7	14.29	0.00	14.29
9. *Dental Laboratory Technician*	17	3	0.00	0.00	0.00	4	25.00	0.00	25.00
10. *X-Ray Technician*	81	10	0.00	40.00	40.00	10	10.00	10.00	0.00
11. *Surgical Technician*	30	8	12.50	12.50	0.00	8	12.50	0.00	12.50
12. *Para-Medical Technician*	25	5	20.00	0.00	20.00	5	40.00	0.00	40.00
D. OTHER HEALTH CARE WORKERS *(Write In)**									
13. Laboratory Technician	172	5	0.00	80.00	80.00	5	80.00	0.00	80.00
14. Dietician	5	2	50.00	0.00	50.00	2	100.00	0.00	100.00
15. Nurses Aide	159	3	0.00	66.67	66.67	5	60.00	20.00	40.00
16.									
17.									
18.									
19.									
20.									

Business Workers Demand Indices

Supply Index	Supply score	Change Index	Change score
1. Sales or Order Clerks	110,751	1. Sales or Order Clerks	89,502
2. Supervisors	70,929	2. Supervisors	52,654
3. Managers or Department Heads	63,884	3. Sales Representatives	41,942
4. Tellers	51,100	4. Secretaries	35,657
5. Secretaries	50,015	5. Tellers	32,850
6. Sales Representatives	40,138	6. Typists	28,865
7. Typists	29,520	7. Managers or Department Heads	28,482
8. Office, General	22,841	8. Loan Underwriters & Processors	20,045
9. Loan Underwriters & Processors	19,906	9. Office, General	17,869
10. Credit Persons	15,826	10. Bookkeepers	10,194
11. Data Entry Operators	13,294	11. Receiving/Warehouse Clerks	9,978
12. Bookkeepers	12,841	12. Auditors & Accountants	9,634
13. Computer Operators	9,450	13. Data Entry Operators	8,109
14. Word Processors	8,003	14. Credit Persons	6,562
15. Purchasing Agents	7,691	15. Word Processors	6,162
16. Machine Transcribers	6,254	16. Computer Programmers	4,417
17. Stenographers	4,985	17. File Clerks	4,120
18. Office Machine Operators	4,202	18. Purchasing Agents	4,034
19. Auditors & Accountants	3,947	19. Computer Operators	3,447
20. Receptionists, Host Persons	3,046	20. Claims, Technicians	2,277
21. Receiving/Warehouse Clerks	2,090	21. Stenographers	2,100
22. File Clerks	1,451	22. Office Machine Operators	1,695
23. Accounting Clerks	1,384	23. Machine Transcribers	1,094
24. Claims, Technicians	1,230	24. Accounting Clerks	923
25. Grocery Checker	1,133	25. Advertising or Display Persons	632
26. Advertising or Display Persons	0	26. Receptionists, Host Persons	597

Industrial Workers Demand Indices

Supply Index	Supply score
1. Machinists	66,264
2. Sheet Metal Workers	38,371
3. Welders & Flame Cutters	31,490
4. Structural Steel	28,840
5. Technicians, Electronic	21,784
6. Mechanics, Heavy Equip. & Diesel	19,451
7. Foremen, Shop	17,441
8. Draftpersons	13,185
9. Mechanics, Refrig./ Air Conditioning	12,315
10. Mechanics, Motor Vehic.	11,620
11. Inspectors, Shop	8,800
12. Mill Wrights	8,625
13. Mechanics, Aircraft, A & P	7,800
14. Power Stations Operator	7,750
15. Technicians, Laboratory	7,625
16. Foundry Practices	6,800
17. Technicians, Electro-Mechanical	5,440
18. Tool Makers	4,822
19. Technicians, Civil Engineering	3,485
20. Technicians, Quality Control	2,975
21. Technicians, Mechanical Engineering	2,846
22. Jewelry, Design & Setting	2,100
23. Layout Persons	2,066
24. Auto Painters	2,000
25. Truck Body, Production & Repair	1,900

Change Index	Change score
1. Machinists	43,065
2. Welders & Flame Cutters	27,662
3. Sheet Metal Workers	24,828
4. Technicians, Electronic	15,560
5. Mechanics, Heavy Equip. & Diesel	10,468
6. Draftspersons	9,992
7. Technicians, Laboratory	9,488
8. Structural Steel Fabrications	9,156
9. Mechanics, Refrig./ Air Conditioning	9,000
10. Mechanics, Motor Vehic.	8,300
11. Inspectors, Shop	6,812
12. Mechanics, Aircraft, A & P	5,850
13. Technicians, Electro-Mechanical	4,371
14. Foremen, Shop	4,326
15. Tool Makers	2,756
16. Foundry Practices	2,267
17. Power Station Operators	2,214
18. Truck Body, Production & Repair	1,900
19. Mill Wrights	1,769
20. Technicians, Civil Engineering	1,525
21. Technicians, Mechanical Engineering	1,220
22. Layout Persons	1,192
23. Compositors & Typesetters	1,166
24. Auto Painters	1,000
25. Technicians, Quality Control	850

Page 2
Industrial Workers

	Supply score		Change score
26. Technicians, Chemical Engineering	1,600	26. Technicians, Instrumentation	828
27. Die Makers	1,288	27. Die Makers	290
28. Technicians, Instrumentation	1,242	28. Technicians, Metallurgical	275
29. Compositors & Typesetters	1,166	29. Photoengravers & Lithographers	240
30. Die Setters	275	30. Engravers, Except Photoengravers	200
31. Electrotypers & Stereotypers	200	31. Die Designers	125
32. Die Designers	166	32. Electrotypers & Stereotypers	100
33. Mechanics, Aircraft Production	100	33. Jewelry, Design & Setting	0
34. Mechanics, Radio & T.V.	100	34. Technicians, Chemical Engineering	0
35. Technicians, Mech. Systems Design	66	35. Die Setters	0
36. Technicians, Metallurgical	0	36. Mechanics, Aircraft Production	0
37. Technicians, Surveying	0	37. Mechanics, Radio & T.V.	0
38. Mechanics, Aircraft Unlicensed	0	38. Technicians, Surveying	0
39. Mechanics, Office Machine	0	39. Mechanics, Aircraft Unlicensed	0
40. Photoengravers & Lithographers	0	40. Mechanics, Avionic Production	0
41. Engravers, Except Photoengravers	0	41. Mechanics, Office Machines	0

Service Workers Demand Indices

Supply Index	Supply score	Change Index	Change score
1. Cooks	23,264	1. Truck/Bus Drivers	27,320
2. Diesel & Heavy Equip. Repair	12,538	2. Cooks	12,021
3. Maintenance Persons	11,022	3. Diesel & Heavy Equip. Repair	8,150
4. Bakers	10,050	4. Waiters/Waitresses	7,832
5. Food Service Management	8,711	5. Aircraft Repair, A & P	7,600
6. Truck/Bus Drivers	8,537	6. Maintenance Persons	6,944
7. Waiters/Waitresses	7,832	7. Beverage Personnel	6,625
8. Host/Hostess	7,675	8. Custodians	5,179
9. Beverage Personnel	7,632	9. Food Service Management	3,200
10. Aircraft Repair, A & P	7,600	10. Bakers	2,871
11. Social Service Workers	5,178	11. Host/Hostess	2,650
12. Automotive Repair	4,316	12. Automotive Repair	2,466
13. Custodians	3,280	13. Landscape Maintenance	1,571
14. Food Dispensing Equip. Technician	1,400	14. Social Service Workers	1,318
15. Entertainers	912	15. Barbers & Beauty Operators	1,100
16. Legal Technicians	500	16. Entertainers	1,042
17. Auto Parts Persons	475	17. Auto Parts Persons	475
18. Barbers & Beauty Operators	0	18. Legal Technicians	437
19. Aircraft Repair, Production	0	19. Floristry	200
20. Aircraft Repair, Unlicensed	0	20. Food Dispensing Equip. Technician	0
21. Avionic Repair	0	21. Aircraft Repair, Production	0
22. Landscape Maintenance	0	22. Aircraft Repair, Unlicensed	0
23. Landscape Design	0	23. Avionic Repair	0
24. Floristry	0	24. Landscape Design	0
25. Firemen & Firewomen	0	25. Firemen & Firewomen	0
26. Police Officers	0	26. Police Officers	0

Health Care Workers Demand Indices

Supply Index	Supply score
1. Nursing (Registered)	19,660
2. Nursing (Practical)	16,500
3. Laboratory Technicians	13,760
4. Nurses Aides	10,600
5. Ward Clerk	6,800
6. Medical Records Librarian	4,357
7. X-Ray Technician	3,240
8. Respiratory Therapist	2,800
9. Para-Medical Technician	500
10. Dental Assistants	442
11. Dental Hygienists	428
12. Dieticians	250
13. Medical Office Assistant	0
14. Dental Laboratory Tech.	0
15. Surgical Technician	0

Change Index	Change score
1. Nursing (Registered)	20,694
2. Laboratory Technicians	13,760
3. Medical Office Asst.	6,450
4. Nurses Aides	6,360
5. Nursing (Practical)	6,211
6. Medical Records Librarian	4,692
7. Ward Clerk	1,275
8. Dental Hygienists	1,250
9. Dental Assistants	1,033
10. Para-Medical Technician	1,000
11. Respiratory Therapist	800
12. Dieticians	500
13. Dental Laboratory Tech.	425
14. Surgical Technician	375
15. X-Ray Technician	0

BUSINESS AND INDUSTRY INFORMATION

A study to learn about the employee training needs of Business and Industry is being conducted by South Seattle Community College. The results will be used toward the development of future instructional programs.

You are requested to provide the information called for in this survey form. Your responses, along with those of other firms being surveyed, will provide an essential part for successful program planning.

Thank you for your assistance.

South Seattle Community College

(Business Code)

CONFIDENTIAL

67 Firms surveyed
34 Responses

BUSINESS AND INDUSTRY SURVEY
South Seattle Community College
6000 Sixteenth Avenue S.W.
Seattle, Washington 98106

Introduction: The purpose of this survey is to learn the present and anticipated future job needs of employers for persons trained in the technical and semi-professional categories. These categories commonly require preparation beyond the high school level but less than the 4-year college degree.

Your response will be treated as confidential. The business code in the upper left hand corner is for tabulation purposes. The only identification of your firm will be as one that cooperated in the study.

Part I: GENERAL INFORMATION

Name of Firm _____ *Phone* _____

Address _____

Person Reporting _____ *Position* _____

Total No. of Employees _____ *No. of Technical and Semi-Professional Employees* _____

Part II: TECHNICAL AND SEMI-PROFESSIONAL JOB INFORMATION

The types of employees commonly found in the business, industrial, service, and health care occupational areas are listed in Column I below and on the following pages. Please add any other technical or semi-professional jobs for which you have employees in the spaces provided following each area.

For each type of employee in your firm, you are asked to provide the information requested in Columns II, III and IV.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
A. BUSINESS WORKERS								
1. Auditors & Accountants	2	1	1	-	1.	-	-	3
2. Bookkeepers	14	2	9	2	2.	-	1	12
3. Credit Persons	7	-	4	2	3.	1	-	4
4. Purchasing Agents	2	-	1	-	4.	-		1
5. Secretaries	8	2	5	-	5.	1	-	5
6. Stenographers	1	-	-	1	6.	-	-	1
7. Machine Transcribers					7.			

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
A. BUSINESS WORKERS, (cont.)								
8. Typists	6	-	5	-	8.	1	-	4
9. File Clerks	5	1	4	-	9.	-	-	4
10. Receptionists, Host Persons	4	1	3	-	10.	-	-	3
11. Word Processors					11.			
12. Computer Programmers					12.			
13. Computer Operators					13.			
14. Data Entry Operators	1	-	-	1	14.	-	-	1
15. Office Machine Operators					15.			
16. Sales Representatives	34	1	2	1	16.	1	-	3
17. Sales or Order Clerks	16	-	6	-	17.	1	1	5
18. Receiving/Warehouse Clerks	1	-	1	-	18.	-	-	1
19. Advertising or Display Persons	1	-	-	1	19.	1	-	-
20. Supervisors	8	-	1	4	20.	-	-	4
21. Managers or Dept. Heads	17	-	3	4	21.	1	-	6
A. OTHER BUSINESS WORKERS *(Write In)**								
22.					22.			
23.					23.			
24.					24.			
25.					25.			
26.					26.			
27.					27.			
28.					28.			
B. INDUSTRIAL WORKERS								
1. Draftspersons					1.			
2. Machinists	3	-	1	-	2.	1	-	-
3. Power Station Operators					3.			
4. Welders & Flame Cutters	1	1	-	-	4.	1	-	-
5. Foremen, Shop	1	-	-	1	5.	-	-	1
6. Inspectors, Shop					6.			
7. Sheet Metal Workers					7.			
8. Mill Wrights					8.			
9. Electrotypers & Stereotypers					9.			
10. Die Setters					10.			

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
B. INDUSTRIAL WORKERS, (cont.)		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
11. Die Makers	1	-	1	-	11.	-	-	1
12. Die Designers	1	-	1	-	12.	-	-	1
13. Lay-out Persons	1	-	1	-	13.	-	-	1
14. Structural Steel Fabricators					14.			
15. Technicians, Electronic	2	-	1	-	15.	1	-	-
16. Technicians, Electro-Mechanical	1	-	1	-	16.	1	-	-
17. Technicians, Chemical Engineering					17.			
18. Technicians, Laboratory	2	-	1	-	18.	-	-	1
19. Technicians, Civil Engineering					19.			
20. Technicians, Mechanical Engineering	1	-	1	-	20.	-	-	1
21. Technicians, Mechanical Systems Design					21.			
22. Technicians, Metallurgical					22.			
23. Technicians, Quality Control					23.			
24. Technicians, Surveying					24.			
25. Technicians, Instrumentation					25.			
26. Mechanics, Motor Vehicle					26.			
27. Mechanics, Heavy Equip. & Diesel	1	-	-	1	27.	-	-	1
28. Mechanics, Aircraft, A&P					28.			
29. Mechanics, Aircraft Production					29.			
30. Mechanics, Aircraft Unlicensed					30.			
31. Mechanics, Avionic Production					31.			
32. Mechanics, Refrig/Air Conditioning					32.			
33. Mechanics, Radio & T.V.					33.			
34. Mechanics, Office Machine					34.			
35. Photoengravers & Lithographers					35.			
36. Engravers, Except Photo-engravers					36.			
37. Compositors & Typesetters	3	-	-	1	37.	-	-	1
38. Foundry Practices					38.			

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
B. INDUSTRIAL WORKERS, (cont.)		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
39. Tool Makers	1	-	1	-	39.	1	-	-
B. OTHER INDUSTRIAL WORKERS (Write In)*								
40.					40.			
41.					41.			
42.					42.			
43.					43.			
44.					44.			
45.					45.			
46.					46.			
47.					47.			
C. SERVICE WORKERS								
1. Barbers & Beauty Operators	7	-	1	1	1.	1	-	1
2. Entertainers					2.			
3. Social Service Workers					3.			
4. Firemen & Firewomen					4.			
5. Police Officers					5.			
6. Legal Technicians					6.			
7. Automotive Repair	2	-	1	-	7.	-	-	1
8. Diesel & Heavy Equipment Repair					8.			
9. Aircraft Repair, A&P					9.			
10. Aircraft Repair, Production					10.			
11. Aircraft Repair, Unlicensed					11.			
12. Avionic Repair					12.			
13. Cooks					13.			
14. Bakers					14.			
15. Waiters/Waitresses					15.			
16. Host/Hostess					16.			
17. Beverage Personnel					17.			
18. Food Service Management	3	-	-	1	18.	-	-	1
19. Food Dispensing Equipment Technician					19.			
20. Landscape Maintenance					20.			
21. Landscape Design					21.			
22. Floristry	4	-	1	-	22.	1	-	-

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
C. OTHER SERVICE WORKERS *(Write In.)**								
23.					23.			
24.					24.			
25.					25.			
26.					26.			
27.					27.			
28.					28.			
29.					29.			
30.					30.			
D. HEALTH CARE WORKERS								
1. Dental Hygienists					1.			
2. Dental Assistants					2.			
3. Nursing (Practical)					3.			
4. Nursing (Registered)					4.			
5. Medical Records Librarian					5.			
6. Medical Office Assistant	3	-	-	1	6.	-	-	1
7. Ward Clerk					7.			
8. Respiratory Therapist					8.			
9. Dental Laboratory Technician					9.			
10. X-Ray Technician					10.			
11. Surgical Technician					11.			
12. Para-Medical Technician					12.			
D. OTHER HEALTH CARE WORKERS *(Write In)**								
13.					13.			
14.					14.			
15.					15.			
16.					16.			
17.					17.			
18.					18.			
19.					19.			
20.					20.			

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

Part III: EMPLOYEES IN-SERVICE JOB TRAINING INFORMATION

____ 1. *Does your firm have an organized training program for its technical and semi-professional employees?*

(1) YES 8 (2) NO 19

2. *If "yes," list each type such as Orientation, On-The-Job, Promotion, Apprenticeship.*

On-the-Job -5

Apprenticeship -3

Promotion -1

____ 3. *Are there any types of post-high school training opportunities (technical and semi-professional categories) not now available to your firm that could assist in providing your firm with better qualified employees or upgrade employee performance if offered?*

(1) Yes 7
(2) No 12
(3) Don't Know 6

4. *Check all the kinds of training listed below that you think would be helpful to your employees for job upgrading purposes. Please list any additional ones in the spaces provided under "other".*

AIR CONDITIONING & REFRIGERATION

____ 1. Theory
____ 2. Equipment Servicing

BLUEPRINT READING

____ 3. Machine Drawings
____ 4. Automation Equipment Layouts
1 5. Electrical/Electronic Circuits
____ 6. Jigs and Fixtures
____ 7. Sheet Metal
____ 8. Fluidics
____ 9. Structural Steel & Concrete

MECHANICS

____ 10. Automotive Service Testing
____ 11. Heavy Equipment & Diesel Repair
____ 12. Fuel and Injection
____ 13. Aircraft Repair, A&P
____ 14. Aircraft Production
____ 15. Automotive Repair

WELDING

____ 16. Basic
____ 17. Technology

MATHEMATICS

3 18. Basic
2 19. Geometry & Trigonometry
1 20. Metrics
6 21. Applied Business
____ 22. Mechanics
4 23. Calculator

SUPERVISORY TRAINING

1 24. Foreman
7 25. Administrative & Management

DRAFTING

1 26. Elementary
1 27. Mechanical, Architectural & Civil
____ 28. Detailing, Machine & Tool
____ 29. Descriptive Geometry
____ 30. Design, Machine & Tool

ELECTRICITY

1 31. DC & AC Fundamentals
1 32. Transformers, Alternators, Controllers
____ 33. Electrical Equipment Maintenance
____ 34. Electric Control Devices
____ 35. Tubes & Transistor Circuits
____ 36. Electronic Equipment Service
____ 37. Thermometry and Pyrometry
____ 38. Basic Electronics
____ 39. Instrumentation
____ 40. Computer Servicing
____ 41. Computer Sciences

HYDRAULICS

____ 42. Fundamentals
____ 43. Pumps, Valves, Controls
____ 44. Circuits
____ 45. Equipment Maintenance

BUSINESS

9 46. Operations & Management
7 47. Marketing
12 48. Salesmanship
2 49. Color, Line & Design
3 50. Advertising & Display

BUSINESS, cont.

4 51. Real Estate
5 52. Finance
6 53. Money & Banking
1 54. Insurance
4 55. Investments
5 56. Economics of Business
3 57. Statistics
11 58. Communications (Grammar, Speech, etc.)
4 59. Report Writing
1 60. Data Processing & Programming
2 61. Data Entry Operations
5 62. Business Methods & Systems
6 63. Accounting
1 64. Word Processing
1 65. Machines Operations
1 66. Shorthand
1 67. Machine Transcription
5 68. Typewriting

GENERAL

11 69. Human Relations
9 70. Communications Skills
3 71. Personal Economics

OTHER

1 72. Food Production Management
____ 73. Beverage Operation Management
____ 74. Landscape Design

(Write in others)

____ 75. _____
____ 76. _____
____ 77. _____
____ 78. _____
____ 79. _____
____ 80. _____
____ 81. _____
____ 82. _____
____ 83. _____
____ 84. _____
____ 85. _____

____ 5. Could employees with two years of training beyond high school adequately perform some of the jobs 4-year college graduates in your firm are now doing?

(1) Yes 17 (2) No 5 (3) Don't know 3

____ 6. If "yes," please estimate the percentages by checking one of the following:

(1) 0-10% 1
(2) 10-30% 3
(3) 30-50% 1
(4) Over 50% 10

____ 7. To what extent do the high school vocational programs in the Puget Sound area meet your job training needs?

(1) Excellent 1 (2) Fair 5 (3) Poor 7 (4) Don't know 12

____ 8. To what extent do the existing educational institutions (including high schools) in the Puget Sound area meet the general education needs of your employees and their families?

(1) Excellent 2 (2) Fair 15 (3) Poor - (4) Don't know 9

____ 9. How important do you believe it is to have appropriate types of training programs organized for employees who lack or have had inadequate basic training?

(1) Very important 19 (2) Fairly important 6 (3) Unimportant 1

THANK YOU FOR YOUR ASSISTANCE

BUSINESS AND INDUSTRY INFORMATION

A study to learn about the employee training needs of Business and Industry is being conducted by South Seattle Community College. The results will be used toward the development of future instructional programs.

You are requested to provide the information called for in this survey form. Your responses, along with those of other firms being surveyed, will provide an essential part for successful program planning.

Thank you for your assistance.

South Seattle Community College

(Business Code)

CONFIDENTIAL

BUSINESS AND INDUSTRY SURVEY
South Seattle Community College
6000 Sixteenth Avenue S.W.
Seattle, Washington 98106

Survey Coverage		
Size	Firms	Employees
Over 100	19	17,935
26-100	40	2,065
6- 25	38	592
1- 5	5	17
	102	20,609

Introduction: The purpose of this survey is to learn the present and anticipated future job needs of employers for persons trained in the technical and semi-professional categories. These categories commonly require preparation beyond the high school level but less than the 4-year college degree.

Your response will be treated as confidential. The business code in the upper left hand corner is for tabulation purposes. The only identification of your firm will be as one that cooperated in the study.

Part I: GENERAL INFORMATION

Name of Firm Aviation Maintenance *Phone* _____

Address _____

Person Reporting _____ *Position* _____

Total No. of Employees _____ *No. of Technical and Semi-Professional Employees* _____

Part II: TECHNICAL AND SEMI-PROFESSIONAL JOB INFORMATION

The types of employees commonly found in the business, industrial, service, and health care occupational areas are listed in Column I below and on the following pages. Please add any other technical or semi-professional jobs for which you have employees in the spaces provided following each area.

For each type of employee in your firm, you are asked to provide the information requested in Columns II, III and IV.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II)* Average number on the job monthly during 1978 at this location in each job.	(III)** Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV)** Expected change in number of employees in foreseeable future. Check (✓) for each job.		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
A. BUSINESS WORKERS								
1. Auditors & Accountants	681	4	39	4	1.	1	-	45
2. Bookkeepers	279	3	54	12	2.	6	1	57
3. Credit Persons	73	-	25	5	3.	3	1	26
4. Purchasing Agents	119	-	43	12	4.	5	1	48
5. Secretaries	608	3	56	15	5.	9	4	57
6. Stenographers	24	-	12	2	6.	2	1	11
7. Machine Transcribers	5	-	4	2	7.	1	-	4

*Number of employees
**Number of firms

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
A. BUSINESS WORKERS, (cont.)		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
8. Typists	257	3	19	4	8.	3	1	18
9. File Clerks	246	3	25	1	9.	1	1	25
10. Receptionists, Host Persons	76	6	27	1	10.	2	1	28
11. Word Processors	5	1	3	2	11.	1	1	4
12. Computer Programmers	280	-	7	5	12.	1	-	10
13. Computer Operators	88	-	17	7	13.	2	-	20
14. Data Entry Operators	100	1	11	6	14.	3	-	15
15. Office Machine Operators	37	1	11	3	15.	-	1	14
16. Sales Representatives	380	2	28	19	16.	16	-	31
17. Sales or Order Clerks	935	1	25	8	17.	5	1	23
18. Receiving/Warehouse Clerks	168	5	34	5	18.	7	1	33
19. Advertising or Display Persons	11	1	8	2	19.	1	-	9
20. Supervisors	497	-	18	14	20.	2	3	27
21. Managers or Dept. Heads	480	1	28	24	21.	4	2	47
A. OTHER BUSINESS WORKERS (Write In)*								
22.					22.			
23.					23.			
24.					24.			
25.					25.			
26.					26.			
27.					27.			
28.					28.			
B. INDUSTRIAL WORKERS								
1. Draftspersons	45	-	6	10	1.	6	-	8
2. Machinists	593	-	5	18	2.	15	1	7
3. Power Station Operators	-	-	1	-	3.	-	-	1
4. Welders & Flame Cutters	316	-	11	6	4.	7	-	9
5. Foremen, Shop	90	-	15	12	5.	5	1	19
6. Inspectors, Shop	66	-	8	8	6.	7	-	9
7. Sheet Metal Workers	255	-	3	8	7.	7	-	4
8. Mill Wrights	1	-	2	-	8.	1	-	1
9. Electrotypers & Stereotypers	-	-	1	-	9.	-	-	1
10. Die Setters	-	-	1	-	10.	-	-	1

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
B. INDUSTRIAL WORKERS, (cont.)		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
11. Die Makers	7	-	1	2	11.	-	-	3
12. Die Designers	1	-	-	1	12.	-	-	1
13. Lay-out Persons	15	-	4	3	13.	2	-	4
14. Structural Steel Fabricators	42	-	-	2	14.	1	-	-
15. Technicians, Electronic	110	-	3	7	15.	3	-	7
16. Technicians, Electro-Mechanical	19	-	2	3	16.	3	-	3
17. Technicians, Chemical Engineering					17.			
18. Technicians, Laboratory	1	-	1	-	18.	1	-	1
19. Technicians, Civil Engineering					19.			
20. Technicians, Mechanical Engineering	9	-	1	4	20.	3	1	1
21. Technicians, Mechanical Systems Design	1	-	-	1	21.	1	-	-
22. Technicians, Metallurgical					22.	1	-	-
23. Technicians, Quality Control	12	-	2	2	23.	-	-	3
24. Technicians, Surveying					24.			
25. Technicians, Instrumentation	9	-	2	1	25.	-	-	3
26. Mechanics, Motor Vehicle	88	-	5	1	26.	2	-	4
27. Mechanics, Heavy Equip. & Diesel	104	-	1	6	27.	6	-	-
28. Mechanics, Aircraft, A&P	542	1	5	5	28.	8	1	2
29. Mechanics, Aircraft Production	1	-	-	1	29.	-	-	1
30. Mechanics, Aircraft Unlicensed	14	2	1	1	30.	2	-	2
31. Mechanics, Avionic Production	150	-	1	-	31.	1	-	-
32. Mechanics, Refrig/Air Conditioning	8	-	-	1	32.	1	-	-
33. Mechanics, Radio & T.V.	6	-	1	1	33.	-	-	1
34. Mechanics, Office Machine					34.			
35. Photoengravers & Lithographers					35.			
36. Engravers, Except Photo-engravers					36.			
37. Compositors & Typesetters					37.			
38. Foundry Practices	2	-	-	1	38.	-	-	1

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
B. INDUSTRIAL WORKERS, (cont.)								
39. Tool Makers	9	-	1	3	39.	2	2	-
B. OTHER INDUSTRIAL WORKERS *(Write In)**								
40.					40.			
41.					41.			
42.					42.			
43.					43.			
44.					44.			
45.					45.			
46.					46.			
47.					47.			
C. SERVICE WORKERS								
1. Barbers & Beauty Operators					1.			
2. Entertainers	21	1	-	-	2.	-	1	-
3. Social Service Workers					3.			
4. Firemen & Firewomen					4.			
5. Police Officers					5.			
6. Legal Technicians					6.			
7. Automotive Repair	3	-	1	-	7.	-	-	1
8. Diesel & Heavy Equipment Repair	16	-	-	4	8.	4	-	-
9. Aircraft Repair, A&P	164	-	4	7	9.	6	1	4
10. Aircraft Repair, Production	-	-	-	1	10.	-	-	-
11. Aircraft Repair, Unlicensed	16	-	3	1	11.	2	-	2
12. Avionic Repair	31	-	-	2	12.	-	1	-
13. Cooks	27	-	2	2	13.	1	-	1
14. Bakers					14.			
15. Waiters/Waitresses	16	-	-	1	15.	-	-	-
16. Host/Hostess	4	-	1	1	16.	-	-	1
17. Beverage Personnel					17.			
18. Food Service Management	13	-	2	1	18.	-	-	2
19. Food Dispensing Equipment Technician	4	-	1	-	19.	-	-	1
20. Landscape Maintenance					20.			
21. Landscape Design					21.			
22. Floristry					22.			

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
C. OTHER SERVICE WORKERS *(Write In.)**		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
23.					23.			
24.					24.			
25.					25.			
26.					26.			
27.					27.			
28.					28.			
29.					29.			
30.					30.			
D. HEALTH CARE WORKERS								
1. Dental Hygienists					1.			
2. Dental Assistants					2.			
3. Nursing (Practical)					3.			
4. Nursing (Registered)	1	-	1	-	4.	-	-	1
5. Medical Records Librarian					5.			
6. Medical Office Assistant					6.			
7. Ward Clerk					7.			
8. Respiratory Therapist					8.			
9. Dental Laboratory Technician					9.			
10. X-Ray Technician					10.			
11. Surgical Technician					11.			
12. Para-Medical Technician					12.			
D. OTHER HEALTH CARE WORKERS *(Write In)**								
13.					13.			
14.					14.			
15.					15.			
16.					16.			
17.					17.			
18.					18.			
19.					19.			
20.					20.			

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

Part III: EMPLOYEES IN-SERVICE JOB TRAINING INFORMATION

1. *Does your firm have an organized training program for its technical and semi-professional employees?*

   (1) YES 37 *(2) NO* 60

2. *If "yes," list each type such as Orientation, On-The-Job, Promotion, Apprenticeship.*

   32 On-the-Job

   Apprenticeship

3. *Are there any types of post-high school training opportunities (technical and semi-professional categories) not now available to your firm that could assist in providing your firm with better qualified employees or upgrade employee performance if offered?*

   (1) Yes 30
   (2) No 31
   (3) Don't Know 27

4. *Check all the kinds of training listed below that you think would be helpful to your employees for job upgrading purposes. Please list any additional ones in the spaces provided under "other".*

AIR CONDITIONING & REFRIGERATION

- 6 1. *Theory*
- 8 2. *Equipment Servicing*

BLUEPRINT READING

- 16 3. *Machine Drawings*
- 2 4. *Automation Equipment Layouts*
- 8 5. *Electrical/Electronic Circuits*
- 11 6. *Jigs and Fixtures*
- 11 7. *Sheet Metal*
- 2 8. *Fluidics*
- 4 9. *Structural Steel & Concrete*

MECHANICS

- 1 10. *Automotive Service Testing*
- 9 11. *Heavy Equipment & Diesel Repair*
- 2 12. *Fuel and Injection*
- 15 13. *Aircraft Repair, A&P*
- 5 14. *Aircraft Production*
- 3 15. *Automotive Repair*

WELDING

- 23 16. *Basic*
- 14 17. *Technology*

MATHEMATICS

- 15 18. *Basic*
- 8 19. *Geometry & Trigonometry*
- 9 20. *Metrics*
- 8 21. *Applied Business*
- 5 22. *Mechanics*
- 7 23. *Calculator*

SUPERVISORY TRAINING

- 28 24. *Foreman*
- 38 25. *Administrative & Management*

DRAFTING

- 14 26. *Elementary*
- 4 27. *Mechanical, Architectural & Civil*
- 6 28. *Detailing, Machine & Tool*
- 1 29. *Descriptive Geometry*
- 3 30. *Design, Machine & Tool*

ELECTRICITY

- 16 31. *DC & AC Fundamentals*
- 6 32. *Transformers, Alternators, Controllers*
- 12 33. *Electrical Equipment Maintenance*
- 9 34. *Electric Control Devices*
- 1 35. *Tubes & Transistor Circuits*
- 10 36. *Electronic Equipment Service*
- 2 37. *Thermometry and Pyrometry*
- 12 38. *Basic Electronics*
- 5 39. *Instrumentation*
- 3 40. *Computer Servicing*
- 5 41. *Computer Sciences*

HYDRAULICS

- 20 42. *Fundamentals*
- 21 43. *Pumps, Valves, Controls*
- 14 44. *Circuits*
- 16 45. *Equipment Maintenance*

BUSINESS

- 27 46. *Operations & Management*
- 20 47. *Marketing*
- 34 48. *Salesmanship*
- 2 49. *Color, Line & Deisgn*
- 8 50. *Advertising & Display*

BUSINESS, cont.

1 51. Real Estate
6 52. Finance
5 53. Money & Banking
3 54. Insurance
2 55. Investments
11 56. Economics of Business
4 57. Statistics
18 58. Communications (Grammar, Speech, etc.)
14 59. Report Writing
5 60. Data Processing & Programming
3 61. Data Entry Operations
9 62. Business Methods & Systems
18 63. Accounting
1 64. Word Processing
5 65. Machines Operations
7 66. Shorthand
3 67. Machine Transcription
15 68. Typewriting

GENERAL

17 69. Human Relations
22 70. Communications Skills
6 71. Personal Economics

OTHER

2 72. Food Production Management
2 73. Beverage Operation Management
____ 74. Landscape Design

(Write in others)

____ 75. _____
____ 76. _____
____ 77. _____
____ 78. _____
____ 79. _____
____ 80. _____
____ 81. _____
____ 82. _____
____ 83. _____
____ 84. _____
____ 85. _____

____ 5. Could employees with two years of training beyond high school adequately perform some of the jobs 4-year college graduates in your firm are now doing?

(1) Yes 56 (2) No 16 (3) Don't know 18

____ 6. If "yes," please estimate the percentages by checking one of the following:

(1) 0-10% 5
(2) 10-30% 17
(3) 30-50% 13
(4) Over 50% 20

____ 7. To what extent do the high school vocational programs in the Puget Sound area meet your job training needs?

(1) Excellent 4 (2) Fair 25 (3) Poor 27 (4) Don't know 39

____ 8. To what extent do the existing educational institutions (including high schools) in the Puget Sound area meet the general education needs of your employees and their families?

(1) Excellent 8 (2) Fair 41 (3) Poor 16 (4) Don't know 30

____ 9. How important do you believe it is to have appropriate types of training programs organized for employees who lack or have had inadequate basic training?

(1) Very important 58 (2) Fairly important 32 (3) Unimportant 2

THANK YOU FOR YOUR ASSISTANCE

AVIATION MAINTENANCE RESOURCE SUMMARY

Group			
34	Fabricated Metal Products (except machinery & transportation)		(16)*
342	Cutlery, Hand Tools, and Hardware	(1)*	
344	Fabricated Structural Metal Products	(9)	
345	Screw Machine Products, Bolts, Etc.	(1)	
347	Metal Services, NEC	(4)	
349	Misc. Fabricated Metal Products	(1)	
35	Machinery, Except Electrical		(16)
354	Metalworking Machinery	(1)	
355	Special Industry Machinery	(6)	
356	General Industrial Machinery	(2)	
359	Misc. Machinery, Except Electrical	(7)	
36	Electrical & Electronic Machinery, Equip. & Supplies		(1)
369	Misc. Electrical Equipment & Supplies	(1)	
37	Transportation Equipment		(10)
372	Aircraft and Parts	(10)	
45	Transportation by Air		(13)
451	Certificated Air Transportation	(4)	
458	Air Transportation Services	(9)	
48	Communication		(2)
483	Radio and Television Broadcasting	(2)	
50	Wholesale Trade - Durable Goods		(44)
508	Machinery, Equipment, and Supplies	(35)	
509	Miscellaneous Durable Goods	(9)	
			(102)

*Numbers in parentheses show number of firms responding.

AVIATION MAINTENANCE - FIRMS RESPONDING

Skytrek Aviation	Everett, Washington
Richland Flying Service	Richland, Washington
Lake Union Air Service, Inc	Seattle, Washington
Klamath Aircraft, Inc	Klamath Falls, Oregon
American Aviation Enterprises	Seattle, Washington
B & M Aviation	Bellingham, Washington
Strand Aviation, Inc.	Kanspell, Montana
Aloha Airlines, Inc.	Honolulu, Hawaii
Western Airlines	Los Angeles, California
Western Skyways, Inc./ AAR Northwest Inc.	Troutdale, Oregon
Pacific Propeller, Inc.	Seattle, Washington
Robertson Aircraft Corporation	Renton, Washington
Flightcraft, Inc.	Portland, Oregon
Horizon Aviation, Inc.	Aurora, Oregon
Burlington Aeroplane Company	Seattle, Washington
Sportsman Airpart, Inc.	Newberg, Oregon
Aerobase, Inc.	Everett, Washington
Everett Aviation, Inc.	Everett, Washington
Aero Systems, Inc.	Seattle, Washington

BUSINESS AND INDUSTRY INFORMATION

A study to learn about the employee training needs of Business and Industry is being conducted by South Seattle Community College. The results will be used toward the development of future instructional programs.

You are requested to provide the information called for in this survey form. Your responses, along with those of other firms being surveyed, will provide an essential part for successful program planning.

Thank you for your assistance.

South Seattle Community College

(Business Code)

CONFIDENTIAL

BUSINESS AND INDUSTRY SURVEY
South Seattle Community College
6000 Sixteenth Avenue S.W.
Seattle, Washington 98106

Survey Coverage		
Size	Firms	Employees
Over 100	34	13,000
26-100	35	1,989
6- 25	8	125
1- 5	1	2
	78	15,116

Introduction: The purpose of this survey is to learn the present and anticipated future job needs of employers for persons trained in the technical and semi-professional categories. These categories commonly require preparation beyond the high school level but less than the 4-year college degree.

Your response will be treated as confidential. The business code in the upper left hand corner is for tabulation purposes. The only identification of your firm will be as one that cooperated in the study.

Part I: GENERAL INFORMATION

Name of Firm Hospitality and Food Services *Phone* _____

Address _____

Person Reporting _____ *Position* _____

Total No. of Employees _____ *No. of Technical and Semi-Professional Employees* _____

Part II: TECHNICAL AND SEMI-PROFESSIONAL JOB INFORMATION

The types of employees commonly found in the business, industrial, service, and health care occupational areas are listed in Column I below and on the following pages. Please add any other technical or semi-professional jobs for which you have employees in the spaces provided following each area.

For each type of employee in your firm, you are asked to provide the information requested in Columns II, III and IV.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II)* Average number on the job monthly during 1978 at this location in each job.	(III)** Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV)** Expected change in number of employees in foreseeable future. Check (✓) for each job.		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
A. BUSINESS WORKERS								
1. Auditors & Accountants	122	3	30	3	1.	6	1	28
2. Bookkeepers	152	-	56	4	2.	5	1	52
3. Credit Persons	44	-	22	-	3.	2	1	20
4. Purchasing Agents	62	2	31	2	4.	6	2	29
5. Secretaries	174	-	38	9	5.	9	-	37
6. Stenographers	11	-	4	2	6.	1	-	7
7. Machine Transcribers	47	1	5	4	7.	2	1	7

*Number of employees
**Number of firms.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
A. BUSINESS WORKERS, (cont.)		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
8. Typists	80	1	11	5	8.	4	1	12
9. File Clerks	60	5	10	1	9.	2	1	14
10. Receptionists, Host Persons	116	4	30	3	10.	5	2	29
11. Word Processors	6	-	3	-	11.	1	-	3
12. Computer Programmers	12	-	6	2	12.	4	1	5
13. Computer Operators	19	-	10	1	13.	5	1	7
14. Data Entry Operators	33	2	11	2	14.	7	1	8
15. Office Machine Operators	19	-	6	-	15.	1	-	6
16. Sales Representatives	337	1	16	3	16.	5	-	17
17. Sales or Order Clerks	85	1	18	1	17.	5	1	14
18. Receiving/Warehouse Clerks	43	4	14	2	18.	2	1	17
19. Advertising or Display Persons	10	-	7	1	19.	1	-	7
20. Supervisors	462	1	26	7	20.	8	3	24
21. Managers or Dept. Heads	671	2	40	14	21.	7	4	46
A. OTHER BUSINESS WORKERS (Write In)*								
22.					22.			
23.					23.			
24.					24.			
25.					25.			
26.					26.			
27.					27.			
28.					28.			
B. INDUSTRIAL WORKERS								
1. Draftspersons	4	-	4	-	1.	1	-	4
2. Machinists	2	-	1	1	2.	-	-	3
3. Power Station Operators	5	-	2	-	3.	1	-	2
4. Welders & Flame Cutters	2	1	1	-	4.	-	-	3
5. Foremen, Shop	34	-	6	2	5.	1	-	7
6. Inspectors, Shop	-	1	1	-	6.	-	1	2
7. Sheet Metal Workers	4	-	1	1	7.	1	-	2
8. Mill Wrights	41	-	1	2	8.	-	-	4
9. Electrotypers & Stereotypers	-	-	1	-	9.	-	-	2
10. Die Setters	-	-	1	-	10.	-	-	2

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
B. INDUSTRIAL WORKERS, (cont.)		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
11. Die Makers			1		11.			2
12. Die Designers			1		12.			2
13. Lay-out Persons	1	-	1	-	13.	-	-	2
14. Structural Steel Fabricators			1		14.			2
15. Technicians, Electronic	7	-	2	2	15.	2	-	3
16. Technicians, Electro-Mechanical	15	-	2	2	16.	2	-	2
17. Technicians, Chemical Engineering			1		17.			2
18. Technicians, Laboratory	76	1	5	-	18.	2	-	5
19. Technicians, Civil Engineering			1		19.			2
20. Technicians, Mechanical Engineering	12	-	1	1	20.	-	-	2
21. Technicians, Mechanical Systems Design			1		21.			2
22. Technicians, Metallurgical			1		22.			2
23. Technicians, Quality Control	8	-	4	-	23.	1	-	4
24. Technicians, Surveying			1		24.			2
25. Technicians, Instru-mentation			1		25.			2
26. Mechanics, Motor Vehicle			1		26.			2
27. Mechanics, Heavy Equip. & Diesel	3	-	2	-	27.	-	-	3
28. Mechanics, Aircraft, A&P			1		28.			2
29. Mechanics, Aircraft Production			1		29.			2
30. Mechanics, Aircraft Unlicensed			1		30.			2
31. Mechanics, Avionic Production			1		31.			2
32. Mechanics, Refrig/Air Conditioning	6	-	3	1	32.	1	-	3
33. Mechanics, Radio & T.V.	2	-	2	-	33.	-	-	3
34. Mechanics, Office Machine			1		34.			2
35. Photoengravers & Lithographers			1		35.			2
36. Engravers, Except Photo-engravers			1		36.			2
37. Compositors & Typesetters			1		37.			2
38. Foundry Practices			1		38.			2

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
B. INDUSTRIAL WORKERS, (cont.)								
39. Tool Makers	-	-	1	-	39.	-	-	2
B. OTHER INDUSTRIAL WORKERS (Write In)*								
40.					40.			
41.					41.			
42.					42.			
43.					43.			
44.					44.			
45.					45.			
46.					46.			
47.					47.			
C. SERVICE WORKERS								
1. Barbers & Beauty Operators	16	1	5	1	1.	-	-	6
2. Entertainers	34	1	10	-	2.	-	1	11
3. Social Service Workers	15	3	2	-	3.	1	-	4
4. Firemen & Firewomen	-	-	-	-	4.	-	-	1
5. Police Officers	32	-	5	-	5.	1	1	4
6. Legal Technicians	-	-	-	-	6.	-	-	1
7. Automotive Repair	14	-	2	1	7.	-	-	4
8. Diesel & Heavy Equipment Repair	6	-	1	1	8.	-	-	3
9. Aircraft Repair, A&P	-	-	-	-	9.	-	-	1
10. Aircraft Repair, Production	-	-	-	-	10.	-	-	1
11. Aircraft Repair, Unlicensed	-	-	-	-	11.	-	-	1
12. Avionic Repair	-	-	-	-	12.	-	-	1
13. Cooks	746	-	27	29	13.	17	3	35
14. Bakers	347	-	8	11	14.	4	2	11
15. Waiters/Waitresses	2076	8	28	8	15.	11	4	29
16. Host/Hostess	354	2	30	7	16.	9	4	26
17. Beverage Personnel	456	2	25	10	17.	9	3	25
18. Food Service Management	191	1	21	17	18.	9	3	28
19. Food Dispensing Equipment Technician	24	-	1	2	19.	-	-	4
20. Landscape Maintenance	10	-	3	-	20.	1	-	3
21. Landscape Design	1	-	1	-	21.	-	-	2
22. Floristry	4	-	2	-	22.	-	1	2

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (√) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (√) for each job.		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
C. OTHER SERVICE WORKERS *(Write In.)**								
23.					23.			
24.					24.			
25.					25.			
26.					26.			
27.					27.			
28.					28.			
29.					29.			
30.					30.			
D. HEALTH CARE WORKERS								
1. Dental Hygienists	2	-	1	-	1.	1	-	1
2. Dental Assistants	4	-	1	-	2.	1	-	1
3. Nursing (Practical)	238	-	2	8	3.	5	1	5
4. Nursing (Registered)	857	2	4	4	4.	4	-	7
5. Medical Records Librarian	15	-	5	4	5.	1	-	8
6. Medical Office Assistant	8	1	1	-	6.	1	-	2
7. Ward Clerk	96	-	2	6	7.	2	1	6
8. Respiratory Therapist	52	-	4	2	8.	1	-	5
9. Dental Laboratory Technician	2	-	1	-	9.	1	-	1
10. X-Ray Technician	47	-	3	3	10.	1	-	6
11. Surgical Technician	28	1	4	1	11.	1	-	6
12. Para-Medical Technician	6	1	2	-	12.	2	-	2
D. OTHER HEALTH CARE WORKERS *(Write In)**								
13.					13.			
14.					14.			
15.					15.			
16.					16.			
17.					17.			
18.					18.			
19.					19.			
20.					20.			

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

Part III: EMPLOYEES IN-SERVICE JOB TRAINING INFORMATION

1. *Does your firm have an organized training program for its technical and semi-professional employees?*

   (1) YES 39 *(2) NO* 34

2. *If "yes," list each type such as Orientation, On-The-Job, Promotion, Apprenticeship.*

   37 Orientation

   On-the-Job

   Apprenticeship

3. *Are there any types of post-high school training opportunities (technical and semi-professional categories) not now available to your firm that could assist in providing your firm with better qualified employees or upgrade employee performance if offered?*

   (1) Yes 23
   (2) No 20
   (3) Don't Know 25

4. *Check all the kinds of training listed below that you think would be helpful to your employees for job upgrading purposes. Please list any additional ones in the spaces provided under "other".*

AIR CONDITIONING & REFRIGERATION

- 6 *1. Theory*
- 10 *2. Equipment Servicing*

BLUEPRINT READING

- 5 *3. Machine Drawings*
- 3 *4. Automation Equipment Layouts*
- 5 *5. Electrical/Electronic Circuits*
- - *6. Jigs and Fixtures*
- 3 *7. Sheet Metal*
- 1 *8. Fluidics*
- 2 *9. Structural Steel & Concrete*

MECHANICS

- - *10. Automotive Service Testing*
- 1 *11. Heavy Equipment & Diesel Repair*
- - *12. Fuel and Injection*
- - *13. Aircraft Repair, A&P*
- - *14. Aircraft Production*
- 1 *15. Automotive Repair*

WELDING

- 5 *16. Basic*
- 1 *17. Technology*

MATHEMATICS

- 12 *18. Basic*
- - *19. Geometry & Trigonometry*
- 4 *20. Metrics*
- 9 *21. Applied Business*
- - *22. Mechanics*
- 5 *23. Calculator*

SUPERVISORY TRAINING

- 9 *24. Foreman*
- 30 *25. Administrative & Management*

DRAFTING

- 1 *26. Elementary*
- - *27. Mechanical, Architectural & Civil*
- - *28. Detailing, Machine & Tool*
- 1 *29. Descriptive Geometry*
- - *30. Design, Machine & Tool*

ELECTRICITY

- 7 *31. DC & AC Fundamentals*
- 6 *32. Transformers, Alternators, Controllers*
- 10 *33. Electrical Equipment Maintenance*
- 7 *34. Electric Control Devices*
- 4 *35. Tubes & Transistor Circuits*
- 5 *36. Electronic Equipment Service*
- 4 *37. Thermometry and Pyrometry*
- 7 *38. Basic Electronics*
- 3 *39. Instrumentation*
- 1 *40. Computer Servicing*
- 3 *41. Computer Sciences*

HYDRAULICS

- 2 *42. Fundamentals*
- 3 *43. Pumps, Valves, Controls*
- 1 *44. Circuits*
- 6 *45. Equipment Maintenance*

BUSINESS

- 27 *46. Operations & Management*
- 12 *47. Marketing*
- 15 *48. Salesmanship*
- 2 *49. Color, Line & Design*
- 6 *50. Advertising & Display*

BUSINESS, cont.

- ___ 51. *Real Estate*
- 5 52. *Finance*
- 2 53. *Money & Banking*
- ___ 54. *Insurance*
- ___ 55. *Investments*
- 7 56. *Economics of Business*
- 4 57. *Statistics*
- 11 58. *Communications (Grammar, Speech, etc.)*
- 8 59. *Report Writing*
- 5 60. *Data Processing & Programming*
- 6 61. *Data Entry Operations*
- 7 62. *Business Methods & Systems*
- 19 63. *Accounting*
- 1 64. *Word Processing*
- 3 65. *Machines Operations*
- 3 66. *Shorthand*
- 2 67. *Machine Transcription*
- 11 68. *Typewriting*

GENERAL

- 33 69. *Human Relations*
- 27 70. *Communications Skills*
- 8 71. *Personal Economics*

OTHER

- 38 72. *Food Production Management*
- 20 73. *Beverage Operation Management*
- 2 74. *Landscape Design*

(Write in others)

- ___ 75. _____
- ___ 76. _____
- ___ 77. _____
- ___ 78. _____
- ___ 79. _____
- ___ 80. _____
- ___ 81. _____
- ___ 82. _____
- ___ 83. _____
- ___ 84. _____
- ___ 85. _____

____ 5. *Could employees with two years of training beyond high school adequately perform some of the jobs 4-year college graduates in your firm are now doing?*

(1) Yes 56 *(2) No* 2 *(3) Don't know* 12

____ 6. *If "yes," please estimate the percentages by checking one of the following:*

(1) 0-10% 12
(2) 10-30% 13
(3) 30-50% 9
(4) Over 50% 19

____ 7. *To what extent do the high school vocational programs in the Puget Sound area meet your job training needs?*

(1) Excellent 2 *(2) Fair* 22 *(3) Poor* 22 *(4) Don't know* 27

____ 8. *To what extent do the existing educational institutions (including high schools) in the Puget Sound area meet the general education needs of your employees and their families?*

(1) Excellent 5 *(2) Fair* 38 *(3) Poor* 16 *(4) Don't know* 13

____ 9. *How important do you believe it is to have appropriate types of training programs organized for employees who lack or have had inadequate basic training?*

(1) Very important 54 *(2) Fairly important* 17 *(3) Unimportant* 3

THANK YOU FOR YOUR ASSISTANCE

HOSPITALITY AND FOOD SCIENCES RESOURCE SUMMARY

Group			
20	Food and Kindred Products		(12)*
	201 Meat Products	(1)*	
	202 Dairy Products	(1)	
	203 Preserved Fruits and Vegetables	(1)	
	204 Grain Mill Products	(2)	
	205 Bakery Products	(2)	
	206 Sugar and Confectionery Products	(1)	
	208 Beverages	(1)	
	209 Misc. Foods and Kindred Products	(3)	
51	Wholesale Trade - Nondurable Goods		(1)
	514 Groceries and Related Products	(1)	
54	Food Stores		(6)
	541 Grocery Stores	(1)	
	542 Meat Markets and Freezer Provisioners	(1)	
	544 Candy, Nut, and Confectionery Stores	(1)	
	546 Retail Bakeries	(2)	
	549 Miscellaneous Food Stores	(1)	
58	Eating and Drinking Places		(39)
	581. Eating and Drinking Places	(39)	
70	Hotels, Rooming Houses, Camps, & Other Lodging Places		(9)
	701 Hotels, Motels, and Tourist Courts	(9)	
80	Health Services		(11)
	805 Nursing and Personal Care Facilities	(5)	
	806 Hospitals	(6)	
			(78)

*Numbers in parentheses show number of firms responding.

HOSPITALITY AND FOODS SCIENCES - FIRMS RESPONDING

Red Lion Inn/Sea-Tac	Seattle, Washington
Doubletree Inn	Seattle, Washington
Consolidated Restaurants, Inc.	Mercer Island, Washington
The Bon (Northgate)	Seattle, Washington
Restaurant Services, Inc., Jake O'Shaughnessey's and F.X. McRory's	Seattle, Washington
Stuart's at Shilshole	Seattle, Washington
The Butcher, The Baker, The Saladmaker	Seattle, Washington
Washington Athletic Club	Seattle, Washington
John Franco's Hidden Harbor	Seattle, Washington
South China Doll Restaurant	Seattle, Washington
Saga Foods, Inc., Velvet Turtle	Bellevue, Washington
Victoria Station	Seattle, Washington
Rose's Hiway Inn	Kent, Washington
College Club	Seattle, Washington
Mirabeau Enterprises	Seattle, Washington
Adair's of Burien	Burien, Washington
Ray's Burien Cafe	Seattle, Washington
C.G.'s Cafe	Seattle, Washington

BUSINESS AND INDUSTRY INFORMATION

A study to learn about the employee training needs of Business and Industry is being conducted by South Seattle Community College. The results will be used toward the development of future instructional programs.

You are requested to provide the information called for in this survey form. Your responses, along with those of other firms being surveyed, will provide an essential part for successful program planning.

Thank you for your assistance.

South Seattle Community College

(Business Code)

CONFIDENTIAL

BUSINESS AND INDUSTRY SURVEY
South Seattle Community College
6000 Sixteenth Avenue S.W.
Seattle, Washington 98106

Survey Coverage		
Size	Firms	Employees
Over 100	-	-
26-100	8	405
6- 25	6	59
1- 5	4	12
	18	476

Introduction: The purpose of this survey is to learn the present and anticipated future job needs of employers for persons trained in the technical and semi-professional categories. These categories commonly require preparation beyond the high school level but less than the 4-year college degree.

Your response will be treated as confidential. The business code in the upper left hand corner is for tabulation purposes. The only identification of your firm will be as one that cooperated in the study.

Part I: GENERAL INFORMATION

Name of Firm: Landscape & Environmental Horticulture *Phone*_____

*Address*_____

*Person Reporting*_____ *Position*_____

*Total No. of Employees*_____ *No. of Technical and Semi-Professional Employees*_____

Part II: TECHNICAL AND SEMI-PROFESSIONAL JOB INFORMATION

The types of employees commonly found in the business, industrial, service, and health care occupational areas are listed in Column I below and on the following pages. Please add any other technical or semi-professional jobs for which you have employees in the spaces provided following each area.

For each type of employee in your firm, you are asked to provide the information requested in Columns II, III and IV.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) * Average number on the job monthly during 1978 at this location in each job.	(III)** Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) ** Expected change in number of employees in foreseeable future. Check (✓) for each job.		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
A. BUSINESS WORKERS								
1. Auditors & Accountants	3	-	3	-	1.	1	-	4
2. Bookkeepers	11	-	9	-	2.	2	-	9
3. Credit Persons	2	-	-	1	3.	-	1	1
4. Purchasing Agents	5	-	-	1	4.	1	1	-
5. Secretaries	7	-	5	-	5.	1	-	5
6. Stenographers	-	-	-	-	6.	-	-	1
7. Machine Transcribers	-	-	-	-	7.	1	-	-

*Indicates number of employees
**Indicates number of firms responding 2

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (√) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (√) for each job.		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
A. BUSINESS WORKERS, (cont.)								
8. Typists	2	1	1	-	8.	2	-	-
9. File Clerks	2	1	1	-	9.	1	-	-
10. Receptionists, Host Persons	1	-	1	-	10.	1	-	-
11. Word Processors	-	-	-	-	11.	-	-	1
12. Computer Programmers	-	-	-	-	12.	2	-	-
13. Computer Operators	1	-	1	-	13.	2	-	-
14. Data Entry Operators	-	-	-	-	14.	1	-	-
15. Office Machine Operators	1	-	-	-	15.	1	-	-
16. Sales Representatives	13	-	3	1	16.	3	-	1
17. Sales or Order Clerks	8	1	3	-	17.	4	-	-
18. Receiving/Warehouse Clerks	1	-	-	-	18.	-	-	1
19. Advertising or Display Persons	-	-	-	-	19.	-	-	1
20. Supervisors	21	-	3	2	20.	5	-	2
21. Managers or Dept. Heads	28	-	5	2	21.	1	-	6
A. OTHER BUSINESS WORKERS *(Write In)**								
22. Stockers	1	-	1	-	22.	1	-	-
23.					23.			
24.					24.			
25.					25.			
26.					26.			
27.					27.			
28.					28.			
B. INDUSTRIAL WORKERS								
1. Draftspersons					1.			1
2. Machinists					2.			1
3. Power Station Operators					3.			1
4. Welders & Flame Cutters					4.			1
5. Foremen, Shop					5.			1
6. Inspectors, Shop					6.			1
7. Sheet Metal Workers					7.			1
8. Mill Wrights					8.			1
9. Electrotypers & Stereotypers					9.			1
10. Die Setters					10.			1

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

Several employees overlap in duties.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
B. INDUSTRIAL WORKERS, (cont.)		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
11. Die Makers					11.			1
12. Die Designers					12.			1
13. Lay-out Persons					13.			1
14. Structural Steel Fabricators					14.			1
15. Technicians, Electronic					15.			1
16. Technicians, Electro-Mechanical					16.			1
17. Technicians, Chemical Engineering					17.			1
18. Technicians, Laboratory					18.			1
19. Technicians, Civil Engineering					19.			1
20. Technicians, Mechanical Engineering					20.			1
21. Technicians, Mechanical Systems Design					21.			1
22. Technicians, Metallurgical					22.			1
23. Technicians, Quality Control					23.			1
24. Technicians, Surveying					24.			1
25. Technicians, Instru-mentation					25.			1
26. Mechanics, Motor Vehicle					26.			1
27. Mechanics, Heavy Equip. & Diesel					27.			1
28. Mechanics, Aircraft, A&P					28.			1
29. Mechanics, Aircraft Production					29.			1
30. Mechanics, Aircraft Unlicensed					30.			1
31. Mechanics, Avionic Production					31.			1
32. Mechanics, Refrig/Air Conditioning					32.			1
33. Mechanics, Radio & T.V.					33.			1
34. Mechanics, Office Machine					34.			1
35. Photoengravers & Lithographers					35.			1
36. Engravers, Except Photo-engravers					36.			1
37. Compositors & Typesetters					37.			1
38. Foundry Practices					38.			1

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
B. INDUSTRIAL WORKERS, (cont.)		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
39. Tool Makers					39.			1
B. OTHER INDUSTRIAL WORKERS (Write In)*								
40. Horticultural	10	-	-	-	40.	1	-	-
41. Soils & Chemicals	2	-	-	-	41.	1	-	-
42. Tractor Drivers	3	-	-	-	42.	-	-	-
43. Outdoor Labors	9	1	-	-	43.	1	-	-
44. Equip. Operators	2	-	1	-	44.	1	-	-
45.					45.			
46.					46.			
47.					47.			
C. SERVICE WORKERS								1
1. Barbers & Beauty Operators					1.			1
2. Entertainers					2.			1
3. Social Service Workers					3.			1
4. Firemen & Firewomen					4.			1
5. Police Officers					5.			1
6. Legal Technicians					6.			1
7. Automotive Repair					7.			1
8. Diesel & Heavy Equipment Repair					8.			1
9. Aircraft Repair, A&P					9.			1
10. Aircraft Repair, Production					10.			1
11. Aircraft Repair, Unlicensed					11.			1
12. Avionic Repair					12.			1
13. Cooks					13.			1
14. Bakers					14.			1
15. Waiters/Waitresses					15.			1
16. Host/Hostess					16.			1
17. Beverage Personnel					17.			1
18. Food Service Management					18.			1
19. Food Dispensing Equipment Technician					19.			1
20. Landscape Maintenance	39	-	1	2	20.	1	-	2
21. Landscape Design	11	2	3	1	21.	-	-	5
22. Floristry	5	-	2	-	22.	-	-	3

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
C. OTHER SERVICE WORKERS *(Write In.)**								
Foliage Plant Specials	30	-	-	1		1	-	-
23. Landscape Construction	10	-	-	2	23.	1	-	1
24. Landscape Labors	7	-	-	2	24.	2	-	-
25. Tissue Culture	-	-	-	-	25.	1	-	-
26. Interior Plant Design	1	-	1	-	26.	1	-	-
27. Maintenance	2	-	1	-	27.	1	-	-
28. Garden Nursery Clerks	2	-	-	1	28.	1	-	-
29. Nursery Labors	20	-	2	1	29.	1	-	1
30. Growers	40	-	-	1	30.	1	-	-
D. HEALTH CARE WORKERS								
1. *Dental Hygienists*					1.			1
2. *Dental Assistants*					2.			1
3. *Nursing (Practical)*					3.			1
4. *Nursing (Registered)*					4.			1
5. *Medical Records Librarian*					5.			1
6. *Medical Office Assistant*					6.			1
7. *Ward Clerk*					7.			1
8. *Respiratory Therapist*					8.			1
9. *Dental Laboratory Technician*					9.			1
10. *X-Ray Technician*					10.			1
11. *Surgical Technician*					11.			1
12. *Para-Medical Technician*					12.			1
D. OTHER HEALTH CARE WORKERS *(Write In)**								
13.					13.			
14.					14.			
15.					15.			
16.					16.			
17.					17.			
18.					18.			
19.					19.			
20.					20.			

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

Part III: EMPLOYEES IN-SERVICE JOB TRAINING INFORMATION

1. Does your firm have an organized training program for its technical and semi-professional employees?

   (1) YES 6 (2) NO 11

2. If "yes," list each type such as Orientation, On-The-Job, Promotion, Apprenticeship.

   6

3. Are there any types of post-high school training opportunities (technical and semi-professional categories) not now available to your firm that could assist in providing your firm with better qualified employees or upgrade employee performance if offered?

   (1) Yes 8
   (2) No 4
   (3) Don't Know 3

4. Check all the kinds of training listed below that you think would be helpful to your employees for job upgrading purposes. Please list any additional ones in the spaces provided under "other".

AIR CONDITIONING & REFRIGERATION

- ____ 1. Theory
- ____ 2. Equipment Servicing

BLUEPRINT READING

- ____ 3. Machine Drawings
- ____ 4. Automation Equipment Layouts
- ____ 5. Electrical/Electronic Circuits
- ____ 6. Jigs and Fixtures
- ____ 7. Sheet Metal
- ____ 8. Fluidics
- ____ 9. Structural Steel & Concrete

MECHANICS

- ____ 10. Automotive Service Testing
- ____ 11. Heavy Equipment & Diesel Repair
- ____ 12. Fuel and Injection
- ____ 13. Aircraft Repair, A&P
- ____ 14. Aircraft Production
- 1 15. Automotive Repair

WELDING

- 1 16. Basic
- ____ 17. Technology

MATHEMATICS

- 1 18. Basic
- ____ 19. Geometry & Trigonometry
- ____ 20. Metrics
- 3 21. Applied Business
- ____ 22. Mechanics
- 1 23. Calculator

SUPERVISORY TRAINING

- 8 24. Foreman
- 6 25. Administrative & Management

DRAFTING

- ____ 26. Elementary
- 1 27. Mechanical, Architectural & Civil
- ____ 28. Detailing, Machine & Tool
- ____ 29. Descriptive Geometry
- ____ 30. Design, Machine & Tool

ELECTRICITY

- 1 31. DC & AC Fundamentals
- ____ 32. Transformers, Alternators, Controllers
- 2 33. Electrical Equipment Maintenance
- 1 34. Electric Control Devices
- ____ 35. Tubes & Transistor Circuits
- ____ 36. Electronic Equipment Service
- ____ 37. Thermometry and Pyrometry
- ____ 38. Basic Electronics
- ____ 39. Instrumentation
- ____ 40. Computer Servicing
- ____ 41. Computer Sciences

HYDRAULICS

- 1 42. Fundamentals
- 1 43. Pumps, Valves, Controls
- 1 44. Circuits
- 3 45. Equipment Maintenance

BUSINESS

- 9 46. Operations & Management
- 7 47. Marketing
- 9 48. Salesmanship
- 4 49. Color, Line & Deisgn
- 5 50. Advertising & Display

BUSINESS, cont.

- ____ 51. *Real Estate*
- ____ 52. *Finance*
- 1 53. *Money & Banking*
- ____ 54. *Insurance*
- ____ 55. *Investments*
- 1 56. *Economics of Business*
- ____ 57. *Statistics*
- 1 58. *Communications (Grammar, Speech, etc.)*
- ____ 59. *Report Writing*
- ____ 60. *Data Processing & Programming*
- 1 61. *Data Entry Operations*
- 3 62. *Business Methods & Systems*
- 2 63. *Accounting*
- ____ 64. *Word Processing*
- ____ 65. *Machines Operations*
- ____ 66. *Shorthand*
- ____ 67. *Machine Transcription*
- 2 68. *Typewriting*

GENERAL

- 4 69. *Human Relations*
- 4 70. *Communications Skills*
- 1 71. *Personal Economics*

OTHER

- ____ 72. *Food Production Management*
- ____ 73. *Beverage Operation Management*
- 6 74. *Landscape Design*

(Write in others)

- 1 75. Landscape Construction
- 1 76. Landscape Maintenance
- 1 77. Horticulture
- 1 78. Freehand Drawing
- 1 79. Nursery Stock Care Chemicals
- ____ 80. _____
- ____ 81. _____
- ____ 82. _____
- ____ 83. _____
- ____ 84. _____
- ____ 85. _____

____ 5. *Could employees with two years of training beyond high school adequately perform some of the jobs 4-year college graduates in your firm are now doing?*

(1) Yes 14 *(2)* 5 *(3) Don't know* 1

____ 6. *If "yes," please estimate the percentages by checking one of the following:*

(1) 0-10% 2
(2) 10-30% 2
(3) 30-50% 3
(4) Over 50% 6

____ 7. *To what extent do the high school vocational programs in the Puget Sound area meet your job training needs?*

(1) Excellent 2 *(2) Fair* 5 *(3) Poor* 6 *(4) Don't know* 4

____ 8. *To what extent do the existing educational institutions (including high schools) in the Puget Sound area meet the general education needs of your employees and their families?*

(1) Excellent 2 *(2) Fair* 11 *(3) Poor* 2 *(4) Don't know* 2

____ 9. *How important do you believe it is to have appropriate types of training programs organized for employees who lack or have had inadequate basic training?*

(1) Very important 12 *(2) Fairly important* 6 *(3) Unimportant* -

THANK YOU FOR YOUR ASSISTANCE

LANDSCAPE AND ENVIRONMENTAL HORTICULTURE SUMMARY

Group		
07	Agriculture Services	
	078 Landscape and Horticulture Services	(7)*
52	Building Materials, Hardware, Garden Supply Dealers	
	526 Retail Nurseries and Garden Stores	(10)
59	Miscellaneous Retail	
	599 Retail Stores, NEC	(1)
		(18)

*Numbers in parentheses show number of firms responding.

HORTICULTURE - FIRMS RESPONDING

Columbia Greenhouse	Seattle, Washington
Briggs Nursery	Olympia, Washington
Swanson's Nursery	Seattle, Washington
Molbak's, Inc.	Woodinville, Washington
Alfred Teufel Nursery, Inc.	Everett, Washington
Garden Valley Nursery, Inc.	Bothell, Washington
Magnolia Garden Center, Inc.	Seattle, Washington
Town and Country Nursery	Bainbridge Island, Washington
Julius Rosso Wholesale Nursery Co.	Seattle, Washington
Hopkins Nursery, Inc.	Bothell, Washington
Evergreen Services Corporation	Bellevue, Washington
Emerald Turfgrass Farms, Inc.	Sumner, Washington
Landscape Services, Inc.	Auburn, Washington
David Poot Designs	Seattle, Washington
Pickering Landscaping	East Wenatchee, Washington
Native Landscaping and Design	Seattle, Washington
Earth Gallery	Seattle, Washington

BUSINESS AND INDUSTRY INFORMATION

A study to learn about the employee training needs of Business and Industry is being conducted by South Seattle Community College. The results will be used toward the development of future instructional programs.

You are requested to provide the information called for in this survey form. Your responses, along with those of other firms being surveyed, will provide an essential part for successful program planning.

Thank you for your assistance.

South Seattle Community College

(Business Code)

CONFIDENTIAL

BUSINESS AND INDUSTRY SURVEY
South Seattle Community College
6000 Sixteenth Avenue S.W.
Seattle, Washington 98106

Survey Coverage		
Size	Firms	Employees
Over 100	15	8,023
26-100	28	1,677
6- 25	22	316
1- 5	8	22
	73	10,038

Introduction: *The purpose of this survey is to learn the present and anticipated future job needs of employers for persons trained in the technical and semi-professional categories. These categories commonly require preparation beyond the high school level but less than the 4-year college degree.*

Your response will be treated as confidential. The business code in the upper left hand corner is for tabulation purposes. The only identification of your firm will be as one that cooperated in the study.

Part I: GENERAL INFORMATION

Name of Firm Motor Vehicle Maintenance *Phone*_____

*Address*_____

*Person Reporting*_____ *Position*_____

*Total No. of Employees*_____ *No. of Technical and Semi-Professional Employees*_____

Part II: TECHNICAL AND SEMI-PROFESSIONAL JOB INFORMATION

The types of employees commonly found in the business, industrial, service, and health care occupational areas are listed in Column I below and on the following pages. Please add any other technical or semi-professional jobs for which you have employees in the spaces provided following each area.

For each type of employee in your firm, you are asked to provide the information requested in Columns II, III and IV.

(I) *Jobs for which persons are employed as technicians or semi-professional workers at this location.*	(II)* *Average number on the job monthly during 1978 at this location in each job.*	(III)** *Supply of qualified persons in your hiring area. Check (✓) for each job.*				(IV)** *Expected change in number of employees in foreseeable future. Check (✓) for each job.*		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
A. BUSINESS WORKERS								
1. *Auditors & Accountants*	59	3	25	2	1.	3	-	22
2. *Bookkeepers*	121	1	38	10	2.	8	-	35
3. *Credit Persons*	25	1	11	5	3.	4	-	11
4. *Purchasing Agents*	26	2	14	4	4.	1	-	15
5. *Secretaries*	113	2	21	9	5.	5	-	22
6. *Stenographers*	30	-	7	-	6.	1	-	4
7. *Machine Transcribers*	12	-	5	1	7.	-	-	4

*Number of employees
**Number of firms.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
A. BUSINESS WORKERS, (cont.)		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
8. Typists	112	2	19	1	8.	2	1	15
9. File Clerks	74	2	14	1	9.	-	1	15
10. Receptionists, Host Persons	20	5	14	5	10.	-	-	18
11. Word Processors	4	-	1	1	11.	1	-	1
12. Computer Programmers	11	1	3	2	12.	1	-	4
13. Computer Operators	25	1	9	1	13.	1	-	8
14. Data Entry Operators	33	1	4	4	14.	-	-	8
15. Office Machine Operators	68	3	6	1	15.	1	-	7
16. Sales Representatives	186	2	19	9	16.	7	-	19
17. Sales or Order Clerks	133	2	13	5	17.	3	-	15
18. Receiving/Warehouse Clerks	321	2	19	-	18.	-	-	19
19. Advertising or Display Persons	1	-	-	1	19.	1	-	-
20. Supervisors	221	1	21	10	20.	5		23
21. Managers or Dept. Heads	211	-	35	11	21.	3	1	35
A. OTHER BUSINESS WORKERS *(Write In)**								
22. Radio Dispatchers	-	-	-	1	22.	1	-	-
23.					23.			
24.					24.			
25.					25.			
26.					26.			
27.					27.			
28.					28.			
B. INDUSTRIAL WORKERS								
1. Draftspersons	4	1	-	-	1.	-	-	1
2. Machinists	96	1	1	2	2.	1	-	3
3. Power Station Operators					3.			
4. Welders & Flame Cutters	8	1	3	2	4.	1	-	4
5. Foremen, Shop	69	5	13	6	5.	1	-	13
6. Inspectors, Shop	24	-	-	2	6.	1	-	1
7. Sheet Metal Workers	35	2	3	2	7.	3	-	1
8. Mill Wrights					8.			
9. Electrotypers & Stereotypers					9.			
10. Die Setters					10.			

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
B. INDUSTRIAL WORKERS, (cont.)		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
11. Die Makers					11.			
12. Die Designers					12.			
13. Lay-out Persons					13.			
14. Structural Steel Fabricators					14.			
15. Technicians, Electronic	11	-	1	1	15.	1	-	1
16. Technicians, Electro-Mechanical	20	-	-	1	16.	-	-	-
17. Technicians, Chemical Engineering					17.			
18. Technicians, Laboratory	22	-	-	1	18.	1	-	-
19. Technicians, Civil Engineering					19.			
20. Technicians, Mechanical Engineering					20.			
21. Technicians, Mechanical Systems Design					21.			
22. Technicians, Metallurgical					22.			
23. Technicians, Quality Control					23.			
24. Technicians, Surveying					24.			
25. Technicians, Instru-mentation	9	-	-	2	25.	2	-	-
26. Mechanics, Motor Vehicle	148	-	8	9	26.	10	-	7
27. Mechanics, Heavy Equip. & Diesel	208	1	2	7	27.	5	2	4
28. Mechanics, Aircraft, A&P	-	-	-	1	28.	1	-	-
29. Mechanics, Aircraft Production					29.			
30. Mechanics, Aircraft Unlicensed					30.			
31. Mechanics, Avionic Production	-	-	-	1	31.	1	-	-
32. Mechanics, Refrig/Air Conditioning	26	-	1	3	32.	3	-	1
33. Mechanics, Radio & T.V.					33.			
34. Mechanics, Office Machine					34.			
35. Photoengravers & Lithographers					35.			
36. Engravers, Except Photo-engravers					36.			
37. Compositors & Typesetters					37.			
38. Foundry Practices					38.			

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
		(1) Surplus	(2) Ad-quate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
B. INDUSTRIAL WORKERS, (cont.)								
39. Tool Makers					39.			
B. OTHER INDUSTRIAL WORKERS *(Write In)**								
40. Truck Body Production	12	-	-	1	40.	1	-	-
41. Truck Body Repair	7	-	-	1	41.	1	-	-
42. Auto Painters	10	-	-	1	42.	-	-	1
43. Auto Painters Helpers	25	-	1	-	43.	-	-	1
44.					44.			
45.					45.			
46.					46.			
47.					47.			
C. SERVICE WORKERS								
1. Barbers & Beauty Operators					1.			
2. Entertainers					2.			
3. Social Service Workers					3.			
4. Firemen & Firewomen					4.			
5. Police Officers					5.			
6. Legal Technicians					6.			
7. Automotive Repair	87	-	6	4	7.	5	-	5
8. Diesel & Heavy Equipment Repair	206	-	3	6	8.	2	-	5
9. Aircraft Repair, A&P	-	-	-	1	9.	1	-	-
10. Aircraft Repair, Production					10.			
11. Aircraft Repair, Unlicensed					11.			
12. Avionic Repair	-	-	-	1	12.	1	-	-
13. Cooks					13.			
14. Bakers					14.			
15. Waiters/Waitresses					15.			
16. Host/Hostess					16.			
17. Beverage Personnel					17.			
18. Food Service Management					18.			
19. Food Dispensing Equipment Technician					19.			
20. Landscape Maintenance	12	1	-	1	20.	1	-	1
21. Landscape Design					21.			
22. Floristry					22.			

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
C. OTHER SERVICE WORKERS *(Write In.)**								
23. Bus Drivers	850	-	1	-	23.	1	-	-
24.					24.			
25.					25.			
26.					26.			
27.					27.			
28.					28.			
29.					29.			
30.					30.			
D. HEALTH CARE WORKERS								
1. *Dental Hygienists*					1.			
2. *Dental Assistants*					2.			
3. *Nursing (Practical)*					3.			
4. *Nursing (Registered)*					4.			
5. *Medical Records Librarian*					5.			
6. *Medical Office Assistant*					6.			
7. *Ward Clerk*					7.			
8. *Respiratory Therapist*					8.			
9. *Dental Laboratory Technician*					9.			
10. *X-Ray Technician*					10.			
11. *Surgical Technician*					11.			
12. *Para-Medical Technician*					12.			
D. OTHER HEALTH CARE WORKERS *(Write In)**								
13.					13.			
14.					14.			
15.					15.			
16.					16.			
17.					17.			
18.					18.			
19.					19.			
20.					20.			

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

Part III: EMPLOYEES IN-SERVICE JOB TRAINING INFORMATION

1. *Does your firm have an organized training program for its technical and semi-professional employees?*

   (1) YES 27 *(2) NO* 42

2. *If "yes," list each type such as Orientation, On-The-Job, Promotion, Apprenticeship.*

   24

   On-the-Job

   Promotion

   Apprenticeship

3. *Are there any types of post-high school training opportunities (technical and semi-professional categories) not now available to your firm that could assist in providing your firm with better qualified employees or upgrade employee performance if offered?*

   (1) Yes 21
   (2) No 17
   (3) Don't Know 61

4. *Check all the kinds of training listed below that you think would be helpful to your employees for job upgrading purposes. Please list any additional ones in the spaces provided under "other".*

AIR CONDITIONING & REFRIGERATION

- 4 *1. Theory*
- 10 *2. Equipment Servicing*

BLUEPRINT READING

- 2 *3. Machine Drawings*
- 1 *4. Automation Equipment Layouts*
- 5 *5. Electrical/Electronic Circuits*
- - *6. Jigs and Fixtures*
- 2 *7. Sheet Metal*
- 2 *8. Fluidics*
- - *9. Structural Steel & Concrete*

MECHANICS

- 14 *10. Automotive Service Testing*
- 28 *11. Heavy Equipment & Diesel Repair*
- 13 *12. Fuel and Injection*
- 2 *13. Aircraft Repair, A&P*
- 2 *14. Aircraft Production*
- 22 *15. Automotive Repair*

WELDING

- 25 *16. Basic*
- 6 *17. Technology*

MATHEMATICS

- 13 *18. Basic*
- 1 *19. Geometry & Trigonometry*
- 2 *20. Metrics*
- 7 *21. Applied Business*
- 6 *22. Mechanics*
- 7 *23. Calculator*

SUPERVISORY TRAINING

- 19 *24. Foreman*
- 23 *25. Administrative & Management*

DRAFTING

- 3 *26. Elementary*
- - *27. Mechanical, Architectural & Civil*
- 1 *28. Detailing, Machine & Tool*
- - *29. Descriptive Geometry*
- 2 *30. Design, Machine & Tool*

ELECTRICITY

- 7 *31. DC & AC Fundamentals*
- 3 *32. Transformers, Alternators, Controllers*
- 5 *33. Electrical Equipment Maintenance*
- 5 *34. Electric Control Devices*
- 1 *35. Tubes & Transistor Circuits*
- 3 *36. Electronic Equipment Service*
- 1 *37. Thermometry and Pyrometry*
- 4 *38. Basic Electronics*
- 2 *39. Instrumentation*
- 1 *40. Computer Servicing*
- 2 *41. Computer Sciences*

HYDRAULICS

- 13 *42. Fundamentals*
- 10 *43. Pumps, Valves, Controls*
- 5 *44. Circuits*
- 13 *45. Equipment Maintenance*

BUSINESS

- 24 *46. Operations & Management*
- 12 *47. Marketing*
- 25 *48. Salesmanship*
- 2 *49. Color, Line & Deisgn*
- 7 *50. Advertising & Display*

BUSINESS, cont.

1 51. Real Estate
3 52. Finance
2 53. Money & Banking
3 54. Insurance
1 55. Investments
6 56. Economics of Business
- 57. Statistics
7 58. Communications (Grammar, Speech, etc.)
10 59. Report Writing
8 60. Data Processing & Programming
7 61. Data Entry Operations
7 62. Business Methods & Systems
15 63. Accounting
2 64. Word Processing
5 65. Machines Operations
4 66. Shorthand
2 67. Machine Transcription
10 68. Typewriting

GENERAL

17 69. Human Relations
16 70. Communications Skills
10 71. Personal Economics

OTHER

___ 72. Food Production Management
___ 73. Beverage Operation Management
___ 74. Landscape Design

(Write in others)

1 75. Insurance Estimating
1 76. Reading Plans
1 77. Construction Plans
___ 78. _____
___ 79. _____
___ 80. _____
___ 81. _____
___ 82. _____
___ 83. _____
___ 84. _____
___ 85. _____

___ 5. Could employees with two years of training beyond high school adequately perform some of the jobs 4-year college graduates in your firm are now doing?

(1) Yes 45 (2) No 7 (3) Don't know 12

___ 6. If "yes," please estimate the percentages by checking one of the following:

(1) 0-10% 6
(2) 10-30% 6
(3) 30-50% 1
(4) Over 50% 31

___ 7. To what extent do the high school vocational programs in the Puget Sound area meet your job training needs?

(1) Excellent 2 (2) Fair 16 (3) Poor 19 (4) Don't know 28

___ 8. To what extent do the existing educational institutions (including high schools) in the Puget Sound area meet the general education needs of your employees and their families?

(1) Excellent 9 (2) Fair 31 (3) Poor 9 (4) Don't know 16

___ 9. How important do you believe it is to have appropriate types of training programs organized for employees who lack or have had inadequate basic training?

(1) Very important 35 (2) Fairly important 23 (3) Unimportant 5

THANK YOU FOR YOUR ASSISTANCE

MOTOR VEHICLE MAINTENANCE RESOURCE SUMMARY

Group			
42	Motor Freight Transportation and Warehousing		(22)*
421	Trucking, Local and Long Distance	(16)*	
422	Public Warehousing	(4)	
423	Trucking Terminal Facilities	(2)	
50	Wholesale Trade, Durable Goods		(11)
501	Motor Vehicles and Automotive Equip.	(9)	
508	Machinery, Equipment and Supplies	(2)	
55	Automotive Dealers & Gasoline Service Stations		(22)
551	New and Used Car Dealers	(9)	
552	Used Car Dealers	(1)	
553	Auto and Home Supply Stores	(6)	
554	Gasoline Service Stations	(2)	
555	Boat Dealers	(1)	
556	Recreation & Utility Trailer Dealers	(1)	
559	Automotive Dealers (nec)	(2)	
75	Automotive Repair, Services and Garages		(11)
753	Automotive Repair Shops	(9)	
754	Automotive Services, Except Repair	(2)	
37	Transportation Equipment**		(3)
371	Motor Vehicles and Equipment	(3)	
49	Electric, Gas, and Sanitary Services**		(3)
493	Combination Utility Services	(1)	
495	Sanitary Services	(2)	
52	Building Materials, Hardware, Garden Supply, and Mobile Home Dealers**		(1)
527	Mobile Home Dealers	(1)	
			(73)

*Figures in parentheses indicate number of respondents.
**Groups combined under heading of "Miscellaneous."

MOTOR VEHICLE MAINTENANCE - FIRMS RESPONDING

Kenworth Northwest, Inc.	Seattle, Washington
Interstate Distributor Co.	Tacoma, Washington
Puget Power	Renton, Washington
Pay Line Northwest Company	Seattle, Washington
N.C. Machinery Company	Seattle, Washington
Trailer Specialist	Seattle, Washington
Marine Engine Repair Co., Inc.	Seattle, Washington
Precision Engine Specialists, Inc.	Seattle, Washington
Seattle, Tool and Supply	Seattle, Washington
Burien Auto Sales	Seattle, Washington
Brooks Biddle Chevrolet	Bothell, Washington
B & B Auto Parts	Bellevue, Washington
Consolidated TR Parts	Seattle, Washington
Mr. Auto Supply, Inc.	Kent, Washington
Fitz Auto Parts, Inc.	Woodinville, Washington
Auburn Mobile Homes	Auburn, Washington
Handy Andy Rent-A-Tool	Seattle, Washington
Bear Creek Motors	Woodinville, Washington
United Autobody	Seattle, Washington
Frank Pantley's Auto Rebuild	Seattle, Washington
Toby's Marine Diesel	Seattle, Washington
Morseth Auto Parts	Seattle, Washington
Lathrop & Sons	Seattle, Washington

BUSINESS AND INDUSTRY INFORMATION

A study to learn about the employee training needs of Business and Industry is being conducted by South Seattle Community College. The results will be used toward the development of future instructional programs.

You are requested to provide the information called for in this survey form. Your responses, along with those of other firms being surveyed, will provide an essential part for successful program planning.

Thank you for your assistance.

South Seattle Community College

(Business Code)

CONFIDENTIAL

BUSINESS AND INDUSTRY SURVEY
South Seattle Community College
6000 Sixteenth Avenue S.W.
Seattle, Washington 98106

Survey Coverage		
Size	Firms	Employees
Over 100	1	185
26-100	1	45
6- 25	9	92
1- 5	6	28
	17	350

Introduction: The purpose of this survey is to learn the present and anticipated future job needs of employers for persons trained in the technical and semi-professional categories. These categories commonly require preparation beyond the high school level but less than the 4-year college degree.

Your response will be treated as confidential. The business code in the upper left hand corner is for tabulation purposes. The only identification of your firm will be as one that cooperated in the study.

Part I: GENERAL INFORMATION

Name of Firm Travel Agencies *Phone* _____

Address (17 Firms, 40 Offices, 350 Employees)

Person Reporting _____ *Position* _____

Total No. of Employees _____ *No. of Technical and Semi-Professional Employees* _____

Part II: TECHNICAL AND SEMI-PROFESSIONAL JOB INFORMATION

The types of employees commonly found in the business, industrial, service, and health care occupational areas are listed in Column I below and on the following pages. Please add any other technical or semi-professional jobs for which you have employees in the spaces provided following each area.

For each type of employee in your firm, you are asked to provide the information requested in Columns II, III and IV.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II)* Average number on the job monthly during 1978 at this location in each job.	(III)** Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) ** Expected change in number of employees in foreseeable future. Check (✓) for each job.		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
A. BUSINESS WORKERS								
1. Auditors & Accountants	3		3		1.			3
2. Bookkeepers	35		7	2	2.	1	1	7
3. Credit Persons					3.			
4. Purchasing Agents	1			1	4.	1		
5. Secretaries	4		4	1	5.	3		3
6. Stenographers					6.			
7. Machine Transcribers					7.			

*Number of employees
**Number of firms responding

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) * Average number on the job monthly during 1978 at this location in each job.	(III) ** Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV)** Expected change in number of employees in foreseeable future. Check (✓) for each job.		
A. BUSINESS WORKERS, (cont.)		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
8. Typists	9		1	1	8.	2		
9. File Clerks	1		1		9.	1		
10. Receptionists, Host Persons	5		2	1	10.	2		1
11. Word Processors					11.			
12. Computer Programmers					12.			
13. Computer Operators				1	13.	1		
14. Data Entry Operators					14.			
15. Office Machine Operators					15.			
16. Sales Representatives	12		2	2	16.	3		1
17. Sales or Order Clerks	1			1	17.	1		
18. Receiving/Warehouse Clerks					18.			
19. Advertising or Display Persons					19.			
20. Supervisors					20.			
21. Managers or Dept. Heads	25		1	2	21.	2		1
A. OTHER BUSINESS WORKERS *(Write In)**								
22. Travel Consultants	207		5	9	22.	11		3
23. Travel Advisor				1	23.	1		
24. Instructor	1			1	24.	1		
25.					25.			
26.					26.			
27.					27.			
28.					28.			
B. INDUSTRIAL WORKERS								
1. Draftspersons					1.			
2. Machinists					2.			
3. Power Station Operators					3.			
4. Welders & Flame Cutters					4.			
5. Foremen, Shop					5.			
6. Inspectors, Shop					6.			
7. Sheet Metal Workers					7.			
8. Mill Wrights					8.			
9. Electrotypers & Stereotypers					9.			
10. Die Setters					10.			

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
B. INDUSTRIAL WORKERS, (cont.)		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
11. Die Makers					11.			
12. Die Designers					12.			
13. Lay-out Persons					13.			
14. Structural Steel Fabricators					14.			
15. Technicians, Electronic					15.			
16. Technicians, Electro-Mechanical					16.			
17. Technicians, Chemical Engineering					17.			
18. Technicians, Laboratory					18.			
19. Technicians, Civil Engineering					19.			
20. Technicians, Mechanical Engineering					20.			
21. Technicians, Mechanical Systems Design					21.			
22. Technicians, Metallurgical					22.			
23. Technicians, Quality Control					23.			
24. Technicians, Surveying					24.			
25. Technicians, Instrumentation					25.			
26. Mechanics, Motor Vehicle					26.			
27. Mechanics, Heavy Equip. & Diesel					27.			
28. Mechanics, Aircraft, A&P					28.			
29. Mechanics, Aircraft Production					29.			
30. Mechanics, Aircraft Unlicensed					30.			
31. Mechanics, Avionic Production					31.			
32. Mechanics, Refrig/Air Conditioning					32.			
33. Mechanics, Radio & T.V.					33.			
34. Mechanics, Office Machine					34.			
35. Photoengravers & Lithographers					35.			
36. Engravers, Except Photo-engravers					36.			
37. Compositors & Typesetters					37.			
38. Foundry Practices					38.			

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
B. INDUSTRIAL WORKERS, (cont.)								
39. Tool Makers					39.			
B. OTHER INDUSTRIAL WORKERS *(Write In)**								
40.					40.			
41.					41.			
42.					42.			
43.					43.			
44.					44.			
45.					45.			
46.					46.			
47.					47.			
C. SERVICE WORKERS								
1. Barbers & Beauty Operators					1.			
2. Entertainers					2.			
3. Social Service Workers					3.			
4. Firemen & Firewomen					4.			
5. Police Officers					5.			
6. Legal Technicians					6.			
7. Automotive Repair					7.			
8. Diesel & Heavy Equipment Repair					8.			
9. Aircraft Repair, A&P					9.			
10. Aircraft Repair, Production					10.			
11. Aircraft Repair, Unlicensed					11.			
12. Avionic Repair					12.			
13. Cooks					13.			
14. Bakers					14.			
15. Waiters/Waitresses					15.			
16. Host/Hostess					16.			
17. Beverage Personnel					17.			
18. Food Service Management					18.			
19. Food Dispensing Equipment Technician					19.			
20. Landscape Maintenance					20.			
21. Landscape Design					21.			
22. Floristry					22.			

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

(I) Jobs for which persons are employed as technicians or semi-professional workers at this location.	(II) Average number on the job monthly during 1978 at this location in each job.	(III) Supply of qualified persons in your hiring area. Check (✓) for each job.				(IV) Expected change in number of employees in foreseeable future. Check (✓) for each job.		
C. OTHER SERVICE WORKERS *(Write In.)**		(1) Surplus	(2) Adequate	(3) Scarce		(1) Increase	(2) Decrease	(3) Remain Same
23. Drivers	15				23.			
24.					24.			
25.					25.			
26.					26.			
27.					27.			
28.					28.			
29.					29.			
30.					30.			
D. HEALTH CARE WORKERS								
1. *Dental Hygienists*					1.			
2. *Dental Assistants*					2.			
3. *Nursing (Practical)*					3.			
4. *Nursing (Registered)*					4.			
5. *Medical Records Librarian*					5.			
6. *Medical Office Assistant*					6.			
7. *Ward Clerk*					7.			
8. *Respiratory Therapist*					8.			
9. *Dental Laboratory Technician*					9.			
10. *X-Ray Technician*					10.			
11. *Surgical Technician*					11.			
12. *Para-Medical Technician*					12.			
D. OTHER HEALTH CARE WORKERS *(Write In)**								
13.					13.			
14.					14.			
15.					15.			
16.					16.			
17.					17.			
18.					18.			
19.					19.			
20.					20.			

*Write in job classifications not listed above, or indicate combinations of listed jobs by writing in numbers of the jobs that are combined.

Part III: EMPLOYEES IN-SERVICE JOB TRAINING INFORMATION*

1. *Does your firm have an organized training program for its technical and semi-professional employees?*

(1) YES	(2) NO	No Response
12	3	2

2. *If "yes," list each type such as Orientation, On-The-Job, Promotion, Apprenticeship.*

Orientation (1)
Sales Training (1)
On-the-Job (10)

3. *Are there any types of post-high school training opportunities (technical and semi-professional categories) not now available to your firm that could assist in providing your firm with better qualified employees or upgrade employee performance if offered?*

(1)	Yes	9
(2)	No	2
(3)	Don't Know	2

4. *Check all the kinds of training listed below that you think would be helpful to your employees for job upgrading purposes. Please list any additional ones in the spaces provided under "other".*

AIR CONDITIONING & REFRIGERATION
- ____ 1. Theory
- ____ 2. Equipment Servicing

BLUEPRINT READING
- ____ 3. Machine Drawings
- ____ 4. Automation Equipment Layouts
- ____ 5. Electrical/Electronic Circuits
- ____ 6. Jigs and Fixtures
- ____ 7. Sheet Metal
- ____ 8. Fluidics
- ____ 9. Structural Steel & Concrete

MECHANICS
- ____ 10. Automotive Service Testing
- ____ 11. Heavy Equipment & Diesel Repair
- ____ 12. Fuel and Injection
- ____ 13. Aircraft Repair, A&P
- ____ 14. Aircraft Production
- ____ 15. Automotive Repair

WELDING
- ____ 16. Basic
- ____ 17. Technology

MATHEMATICS
- 10 18. Basic
- ____ 19. Geometry & Trigonometry
- ____ 20. Metrics
- 1 21. Applied Business
- ____ 22. Mechanics
- ____ 23. Calculator

SUPERVISORY TRAINING
- ____ 24. Foreman
- 2 25. Administrative & Management

DRAFTING
- ____ 26. Elementary
- ____ 27. Mechanical, Architectural & Civil
- ____ 28. Detailing, Machine & Tool
- ____ 29. Descriptive Geometry
- ____ 30. Design, Machine & Tool

ELECTRICITY
- ____ 31. DC & AC Fundamentals
- ____ 32. Transformers, Alternators, Controllers
- ____ 33. Electrical Equipment Maintenance
- ____ 34. Electric Control Devices
- ____ 35. Tubes & Transistor Circuits
- ____ 36. Electronic Equipment Service
- ____ 37. Thermometry and Pyrometry
- ____ 38. Basic Electronics
- ____ 39. Instrumentation
- ____ 40. Computer Servicing
- ____ 41. Computer Sciences

HYDRAULICS
- ____ 42. Fundamentals
- ____ 43. Pumps, Valves, Controls
- ____ 44. Circuits
- ____ 45. Equipment Maintenance

BUSINESS
- 2 46. Operations & Management
- 3 47. Marketing
- 14 48. Salesmanship
- ____ 49. Color, Line & Deisgn
- 1 50. Advertising & Display

*Figures show number of firms

BUSINESS, cont.

____ 51. *Real Estate*
____ 52. *Finance*
____ 53. *Money & Banking*
____ 54. *Insurance*
____ 55. *Investments*
____ 56. *Economics of Business*
1 57. *Statistics*
2 58. *Communications (Grammar, Speech, etc.)*
____ 59. *Report Writing*
1 60. *Data Processing & Programming*
3 61. *Data Entry Operations*
1 62. *Business Methods & Systems*
2 63. *Accounting*
2 64. *Word Processing*
____ 65. *Machines Operations*
____ 66. *Shorthand*
____ 67. *Machine Transcription*
9 68. *Typewriting*

GENERAL

11 69. *Human Relations*
10 70. *Communications Skills*
2 71. *Personal Economics*

OTHER

____ 72. *Food Production Management*
____ 73. *Beverage Operation Management*
____ 74. *Landscape Design*

(Write in others)

6 75. Geography
4 76. Computer
____ 77. -Terminology-Printouts
2 78. Political Science
3 79. Transportation
____ 80. -Basics-Booking
3 81. Office-Basic-Filing
1 82. Govt. Rules & Regulations
2 83. Basic Business & Automation
1 84. Telephone Usage
1 85. Travel Agent Training
1 Bilingual
1 Personality Development
1 Motivational
1 Handling Stress

____ 5. *Could employees with two years of training beyond high school adequately perform some of the jobs 4-year college graduates in your firm are now doing?*

(1) Yes 14 *(2) No* - *(3) Don't know* 1

____ 6. *If "yes," please estimate the percentages by checking one of the following:*

(1) 0-10% -
(2) 10-30% -
(3) 30-50% -
(4) Over 50% 12

____ 7. *To what extent do the high school vocational programs in the Puget Sound area meet your job training needs?*

(1) Excellent *(2) Fair* 4 *(3) Poor* 6 *(4) Don't know* 4

____ 8. *To what extent do the existing educational institutions (including high schools) in the Puget Sound area meet the general education needs of your employees and their families?*

(1) Excellent 2 *(2) Fair* 8 *(3) Poor* 4 *(4) Don't know* -

____ 9. *How important do you believe it is to have appropriate types of training programs organized for employees who lack or have had inadequate basic training?*

(1) Very important 14 *(2) Fairly important* 1 *(3) Unimportant* -

THANK YOU FOR YOUR ASSISTANCE

TRAVEL AGENCY - FIRMS RESPONDING

Honey Hansen Travel	Seattle, Washington
Compass Travel Service	Seattle, Washington
Kinomoto Travel	Seattle, Washington
World Wide Travel	Seattle, Washington
John Parker and Associates	Seattle, Washington
Kim's Travel Service	Seattle, Washington
Sean Travel	Seattle, Washington
Kawaguchi Travel	Seattle, Washington
Doug Fox Travel	Bellevue, Washington
Rainier Travel Service	Seattle, Washington
John's Travel	Seattle, Washington
Consolidated Travel	Seattle, Washington
Century Travel Bureau	Seattle, Washington
Andy's Travel Center	Seattle, Washington
Ray Jones Travel	Seattle, Washington
United Travel Service	Seattle, Washington
Royal World Travel Service	Seattle, Washington

Date _____ Cluster Number _____

Time _____ Street Address _____

Respondent's Sex ____Male ____Female Interviewer _____

Hello. I'm_____from South Seattle Community College. Have you heard about the study that we are conducting? . . . . . It's purpose is to learn about the needs and interests of the residents in South and West Seattle. We would like to include the opinions from your household. I need to speak to a resident of this household that is over 18 years of age. Would that be you?

- -

1. Are any of your household members over 18 enrolled in an educational or training program offered by a school?

____1. Yes

How many? (Circle the Number Below)

1.a. Full time 1 2 3 4

1.b. Part time 1 2 3 4

____2. No

2. Are any members of your household over 18 participating in an educational or training program now at their place of employment?

____1. Yes

1.a. How many? (Circle the Number Below)

1 2 3 4

____2. No

3. Are any members of your household over 18 participating in an educational or training or cultural program through a community agency? (YMCA, etc.)

____1. Yes

1.a. How many? (Circle the Number Below)

1 2 3 4

____2. No

4. Have you ever been in an adult education program (learning program that did not lead to a degree)?

____1. Yes

A. Has it been

____1. Within the last 2 years?

____2. Over 2 years ago?

B. How did you learn about it?

____1. From a friend or family member.

____2. Read about it.

____3. Heard about it on TV or Radio.

____4. From my employer or supervisor.

____5. Other: (write in) _____

C. Was the program

1. Useful ____Yes ____No

2. Interesting ____Yes ____No

D. If you were able to go back, would you enroll in it again?

____1. Yes____

____2. No____

____2. No

5. Have you ever been on the campus of any of the following schools?

____1. South Seattle Community College.

____2. Seattle Central Community College.

____3. North Seattle Community College.

____4. Highline Community College.

____5. Green River Community College.

6. Are there some types of educational-cultural services or activities that you feel should be available to adults in this area of Seattle?

____1. Yes

1.a. What are they? (List)

_____ _____

_____ _____

____2. No

____3. Don't Know

7. Here are personal reasons that some people give for not participating in educational, occupational training, or cultural activities. Which, if any, of these are a concern to you?

____1. Not enough time.

____2. Family responsibilities.

____3. A work schedule that interferes.

____4. Don't think that I would succeed.

____5. I'm too tired at the end of the day.

____6. I don't know what is available.

IF YOU WERE TO PARTICIPATE IN EDUCATIONAL, OCCUPATIONAL TRAINING OR CULTURAL ACTIVITIES NOW:

8. Would it make a difference to you if:

____Yes ____No A. provision for child care were available?

____Yes ____No B. transportation could be arranged for?

____Yes ____No C. you had to pay for participating?

____Yes ____No D. friends or members of your family also participated?

____Yes ____No E. you received a certificate upon completion?

9. What would be your purpose?

____1. To learn something of general interest to become better informed.

____2. To learn how to handle better the every day problems of living.

____3. To learn how to do my present job better and/or prepare for advancement.

____4. To learn something to use in my spare time.

____5. To complete a program that I have started.

____6. To meet new and interesting people.

____7. Other: (write in) _____

10. Where would you prefer to have the classes located?

____1. At a Community College campus.

____2. At my work location

____3. At the nearest elementary or high school.

____4. At a community center.

____5. Other: (write in) _____

11. What day or days of the week would you prefer?

____1. Doesn't matter.
____2. Monday
____3. Tuesday
____4. Wednesday
____5. Thursday
____6. Friday
____7. Saturday
____8. Sunday
____9. A weekend combination.

12. What time of the day would you prefer?

____1. Doesn't matter
____2. Early Morning
____3. During the Day
____4. Late Afternoon
____5. Evening
____6. Other: (write in)
_____

13. Have you ever used any of the following methods of learning? What is your reaction to each that you have used?

	Ever Used?		Reactions?	
	Yes	No	Liked	Disliked
1. Correspondence Study	____	____	____	____
2. Educational Television	____	____	____	____
3. Video Cassettes	____	____	____	____
4. Tapes and/or Records	____	____	____	____
5. Supervised Independent Study	____	____	____	____
6. Study With a Tutor	____	____	____	____
7. Radio Study Centers	____	____	____	____

14. WOULD YOU LIKE TO PARTICIPATE IN A PROGRAM OF EDUCATIONAL, OCCUPATIONAL TRAINING, OR CULTURAL ACTIVITIES IN THE NEAR FUTURE?

____1. Yes ____2. Maybe ____3. No ____4. Don't Know

(IF ANSWER TO ITEM 14 WAS (3)No or (4)Don't Know SKIP OVER TO ITEM 20 on PAGE 7)

15. Would you be interested in any of the following types of assistance? (Check all that are indicated.)

____1. Refresher Mathematics
____2. Reading Improvement
____3. Improve Communication Skills
____4. Improve Human Relations Skills
____5. English as a Second Language
____6. GED or High School Completion
____7. Other: (write in)
_____
_____

16. The following services are offered at South Seattle Community College. Which ones would be of value to you? (Check all that are indicated.)

____1. Counseling Services	____ 8. Orientation to College
____2. Career Information	____ 9. Academic Advisement
____3. Transfer Information	____10. Tutoring Services
____4. Financial Assistance	____11. Job Placement Services
____5. Health Services	____12. Testing Services
____6. Student Activities	____13. Minority Affairs Assistance
____7. Library Services	____14. Women's Programs

17. Would you be interested in enrolling in any of the following occupational areas for either (a) a program to prepare for a job, or (b) a short course or courses to upgrade or advance your present skills or knowledge.

	(a) Preparatory	(b) Upgrading
AIRCRAFT		
1. Airframe and Powerplant	_____	_____
2. Avionics Technology	_____	_____
3. Aviation Maintenance	_____	_____
MOTOR VEHICLE		
4. Automotive Body	_____	_____
5. Automotive Mechanic	_____	_____
6. Auto Parts Counterman	_____	_____
7. Automotive Machinist	_____	_____
8. Diesel & Heavy Equipt. Mechanic	_____	_____
9. Commercial Truck Driving	_____	_____
TECHNICAL EDUCATION		
10. Industrial Technology	_____	_____
11. Industrial Engineering Technology	_____	_____
12. Industrial Drafting & Design Tech.	_____	_____
13. Mechanical Engineering Technology	_____	_____
14. Civil Engineering Technology	_____	_____
15. Bev. & Food Dispensing Equipt. Tech.	_____	_____
16. Building Maintenance Technology	_____	_____

17. Interest in Occupational Areas -continued-

	(a) Preparatory	(b) Upgrading
HORTICULTURE		
17. Landscape & Environmental Hort.	_____	_____
18. Retail Floristry	_____	_____
HOSPITALITY AND FOOD SERVICE		
19. Hospitality and Food Services	_____	_____
20. Hotel and Restaurant Management	_____	_____
BUSINESS AND OFFICE		
21. Secretarial Science	_____	_____
22. Accounting and Finance	_____	_____
23. General Business	_____	_____
24. Word Processing	_____	_____
HOME AND FAMILY LIFE		
25. Home Economics	_____	_____
26. Early Childhood Education	_____	_____
COLLEGE TRANSFER		
27. College or University Credit Courses	_____	_____
SUPERVISION AND MANAGEMENT		
28. Supervision and Management	_____	_____
OTHER		
29. Other Occupational Areas (list):		
_____	_____	_____
_____	_____	_____

18. A typical college course--vocational or academic--costs about $9.60 per credit. For example, a 5 credit course meeting twice a week for about 6 hours would cost $48 for a quarter (a period of 10-12 weeks).

1. Do you think this cost is: Too High____ About Right____ Too Low____
2. Would you pay this amount for a course that you wanted? Yes___ No___

19. Would you be interested in any of the following courses or activities?

____1. Painting
____2. Ceramics
____3. Photography
____4. Art Appreciation
____5. Music Appreciation
____6. Ethnic Programs
____7. Group Singing
____8. Contemporary Drama
____9. Dance/Exercise
___10. Creative Writing
___11. Furniture Making
___12. Home Repair
___13. Automotive Maintenance
____14. Women's Programs
____15. Self Defense
____16. Interior Design
____17. Landscape Design
____18. Fabric & Apparel Design
____19. A Lecture Series
____20. Consumer Interest Topics
____21. Technical Report Writing
____22. Gourmet Cooking
____23. Other: (List)
_____
_____
_____

20. Are you employed at the present time? ____Yes ____No

(IF ANSWER TO ITEM 20 WAS "No," SKIP OVER TO ITEM 27 on PAGE 9.)

21. How long have you worked for your present employer (or been self-employed)?

____1. Less than one year.
____2. 1-3 years.
____3. 4-5 years.
____4. Over 5 years.

22. Did you need specialized training to obtain your present position?

____1. Yes

1.a. Where did you get it?

____On-the-Job
____At a Community College
____At a Vocational or Trade School
____Other: _____
_____

____2. No

23. How far do you think that you have gone in your present line of work?

____1. About as far as I can go.

____2. Probably can go further.

____3. Really don't know.

24. Would training to upgrade and improve your knowledge or skills enable you to go further in your present line of work?

____1. Yes

1.a. What type of training? _____.

____2. No

25. How satisfied are you with your present job?

____1. Very Satisfied.

____2. Moderately Satisfied.

____3. A Little Dissatisfied.

____4. Very Dissatisfied.

26. Does your employer provide support for the employees to continue their occupational education or training?

____1. Yes

1.a. What does your employer provide?

____1. Pays all tuition and/or fees.

____2. Pays some of the tuition and/or fees.

____3. Provides training programs that are needed.

____4. Gives encouragement and moral support.

____5. Provides time for training.

____6. Other: _____.

____2. No

I would like to complete this survey with some information about you as a person. It will be of value in the planning of programs to most specifically meet your needs and those of the others in the community.

27. How long have you lived in this area of Seattle?

____1. Less than one year.
____2. 1-5 years.
____3. 6-10 years.
____4. Over 10 years.

28. What was the last grade in formal schooling that you completed?

____1. 8th Grade or Less.
____2. Some High School.
____3. High School Graduate.
____4. Vocational-Technical or Business School.
____5. Some Community College or College.
____6. Community College Graduate.
____7. 4 Year College Graduate.
____8. Some Graduate Work.
____9. Completed a Graduate Degree.

29. What is your age group?

____1. 18-20
____2. 21-25
____3. 26-30
____4. 31-40
____5. 41-50
____6. 51-60
____7. 61-65
____8. Over 65

(Use your own discretion as to <u>whether or not</u> to ask the following item.)

For verification of this interview, what is your telephone number?_____

Would you like to receive information about any of the programs or services at South Seattle Community College? I'll be pleased to leave this information request form with you if you'd like.

THANK YOU VERY MUCH FOR YOUR ASSISTANCE.

STUDENT INFORMATION

A study for planning the future development of training and educational programs at South Seattle Community College is being conducted. You are invited to participate in the study.

Your assistance by providing the information requested is essential for the success of the study. It will be greatly appreciated.

South Seattle Community College

Please provide the information requested by writing the number of your answer in the space in front of each question or by following other directions given for specific questions.

____ 1. Sex.
(1) Male
(2) Female

____ 2. Work completed toward a SSCC certificate or degree, at the beginning of this quarter, including transfer credits. *(Select One)*
(1) First year equivalency (44 credit hours or less completed).
(2) Second year equivalency (45 credit hours or more completed).

____ 3. Age category at your nearest birthday. *(Select One)*

(1) Under 18	(4) 25-29	(7) 40-44
(2) 18-21	(5) 30-34	(8) 45-49
(3) 22-24	(6) 35-39	(9) 50 or over.

____ 4. Which course or curriculum best describes the one that you took in High School? *(Select One)*

(1) General (i.e. Art)	(6) Distributive Education
(2) College Preparatory	(7) Health Occupations
(3) Industrial Arts	(8) Homemaking
(4) Trades	(9) Agriculture
(5) Business & Office	(10) Other _____

____ 5. Where did you attend high school? *(Select One)*

(1) West Seattle	(9) Kennedy
(2) Chief Sealth	(10) Highline
(3) Rainier Beach	(11) Tyee
(4) Cleveland	(12) Mt. Rainier
(5) Franklin	(13) Vashon Island
(6) Garfield	(14) Another High School in the Puget Sound Area
(7) Evergreen	(15) Another High School in Washington State
(8) Glacier	(16) Another High School outside of Washington State

____ 6. In which part of your high school graduating class would your grades have placed you? *(Select One)*
(1) Top third
(2) Middle third
(3) Lower third
(4) Obtained G.E.D.
(5) Did not graduate from high school

____ 7. On what basis are you enrolled this quarter? *(Select One)*
(1) Full-Time (10 credit hours or more)
(2) Part-Time (9 credit hours or less)

____ 8. Do you plan to complete a degree or certificate program at South Seattle Community College? *(Select One)*

(1) Yes
(2) No
(3) Don't know

____ 9. What is the highest level of education or training that you plan to complete within the next ten years? *(Select One)*

(1) G.E.D. or High School completion
(2) Occupational Certificate
(3) Associate Degree
(4) Bachelor's Degree
(5) Master's Degree
(6) Doctor's Degree
(7) Other

____10. Which one of the following are you *most* likely to do the year after you have completed your work at South Seattle Community College? *(Select One)*

(1) Transfer to a four-year college/university
(2) Enter another trade or technical school or institute
(3) Enter military service
(4) Be employed on a full-time job
(5) Work on a part-time job
(6) Run my own business
(7) Become a full-time homemaker
(8) Travel
(9) Other or Combinations of Above:
(Write In) _____

____11. How many hours, on the average, are you employed each week this quarter while enrolled in College classes? *(Select One)*

(1) Not employed
(2) Less than 20 hours
(3) 20-29 hours
(4) 30 hours or more

____12. From which source did you obtain most information about South Seattle Community College? *(Select One)*

(1) Other high school students
(2) High school teachers or guidance counselors
(3) Friends or relatives
(4) Written materials about SSCC (Catalog, brochures, newspaper articles, etc.)
(5) Employer or persons I work with.
(6) Representative of SSCC
(7) SSCC students
(8) Other: *(Write In)* _____

____13. In which program of study are you enrolled? *(Write its number in the space preceding this item)*

(1) Airframe & Powerplant
(2) Avionics Technology
(3) Aviation Maintenance
(4) Automotive Bodyman
(5) Automotive Mechanic
(6) Auto Parts Counterman
(7) Automotive Machinist
(8) Diesel & Heavy Equipment Mechanic
(9) Commercial Truck Driving
(10) Industrial Technology
(11) Industrial Engineering Technology
(12) Industrial Drafting & Design Technology
(13) Mechanical Engineering Technology
(14) Civil Engineering Technology
(15) Beverage & Food Dispensing Equipt. Technology
(16) Building Maintenance Technology
(17) Landscape & Environmental Horticulture
(18) Retail Florestry
(19) Hospitality & Food Services
(20) Hotel & Restaurant Management
(21) Secretarial Science
(22) Accounting & Finance
(23) General Business
(24) Word Processing
(25) Home Economics
(26) Early Childhood Education
(27) College Transfer
(28) Supervision & Management
(29) Other: *(Write In)*_____

____14. What is your most important reason for pursuing an education beyond high school? *(Select One)*

(1) To obtain skills necessary for advancement in my present job
(2) Desire a broader cultural-educational background
(3) Encouragement by parents or other relatives
(4) To enter an occupation requiring technical skills and/or associate degree
(5) To enter an occupation requiring a bachelor's or higher degree
(6) To gain higher social status and prestige
(7) Other: *(Write In)*_____

____15. Which of the following were important reasons why you enrolled at South Seattle Community College?

(1. Place the number of the most important reason in the space in front of the question.)
(2. Indicate by a check (✓) all other reasons that were also important.)

____(1) Low cost
____(2) College classes conveniently located
____(3) Offered courses that I wanted
____(4) Denied admission to another school of my choice
____(5) I had difficulty in another college
____(6) Heard the College offers a good education
____(7) Advice of others
____(8) Wanted to live at home while attending college
____(9) Other: *(Write In)*_____

____16. If you were making the choice again, would you enroll at South Seattle Community College? *(Select One)*

(1) Yes
(2) No
(3) Don't know

17. *(Answer this item ONLY if your answer to item 16 was "No.")*

What reasons caused you to answer that you would not enroll at South Seattle Community College again? *(Check all that apply.)*

____ (1) Lack of interest by faculty, administration, staff
____ (2) Lack of student activities
____ (3) Limited course or program offerings
____ (4) Grading system needs improvement
____ (5) Lack of desired college atmosphere
____ (6) Difficulty of courses not to my liking
____ (7) Lack of direction
____ (8) Assistance was not available when needed
____ (9) Lack of sufficient funds
____(10) Other: *(Write In)* _____

18. Listed below are twelve job categories. Please classify your parents' occupation with the number of the choice below that seems to fit best.

____(1) Father ____ (2) Mother

(1) Professional I (doctor, lawyer, professor)
(2) Professional II (teacher, engineer, accountant)
(3) Managerial, Supervisory, or Executive
(4) Semi-professional or Technical (technician, computer programmer)
(5) Owner of a business or farm
(6) Sales or clerical (secretary, store clerk, etc.)
(7) Semi-skilled or skilled worker (machinist, carpenter, construction worker, truck driver)
(8) Unskilled worker or general labor
(9) Homemaker full-time
(10) Retired
(11) Unemployed
(12) Other: *(Write In)*

(1) Father _____
(2) Mother _____

____ 19. If you are employed this quarter, which one of the categories listed above represents your present job?

____ 20. Using these same categories, which one represents your career goal?

____ 21. What do you think about the availability of training and educational opportunities beyond high school in the Puget Sound area. *(Select One)*

(1) Adequate for all who desire more school
(2) Fair amount of opportunity, but some desiring education or training can't find what they want
(3) Poor. More opportunities should be available locally

____ 22. How well do you think the course of study you are in is preparing you for what you plan to do upon its completion?

(1) Not very well
(2) Fair, but could be better
(3) Good in most ways, but could be better in some ways
(4) It is giving me just what I think I need

23. If your answer to question 22 was "1", "2", or "3", how do you think South Seattle Community College could prepare you better? *(Write In)*

_____

_____

_____

_____

_____

24. From your contacts with other students, on the average how likely is it that each kind of person enrolls at South Seattle Community College? *(Opposite EACH item, place a check (✓) under the category you choose.)*

		HIGH LIKELIHOOD	AVERAGE LIKELIHOOD	NOT LIKELY
1. Persons who can't finance going somewhere else	1.			
2. Students with below average high school grades	2.			
3. Persons who want a technical/semi-professional career	3.			
4. People who "flunk out" elsewhere or can't get into another college	4.			
5. Persons who want a good education	5.			
6. Students whose high school grades were average or higher	6.			
7. Persons with no financial difficulties	7.			
8. Persons with job and/or family responsibilities	8.			
9. Persons who have been away from school for several years	9.			

25. How important do you think each of the following reasons is as to why more of your friends or high school classmates *did not* enroll in South Seattle Community College. *(Opposite each reason place a (✓) to indicate its importance.)*

		NONE	SOME	MUCH
1. Lack of money	1.			
2. Wanted better college	2.			
3. Wanted to live away from home	3.			
4. Had little or no information about the College	4.			
5. Advice of high school counselors not to enroll	5.			

		MUCH	SOME	NONE
6. Advice of high school teachers not to enroll	6.	_____	_____	_____
7. Program wanted not offered at SSCC	7.	_____	_____	_____
8. Lack of transportation	8.	_____	_____	_____
9. Had no interest in further education	9.	_____	_____	_____
10. Too much like high school	10.	_____	_____	_____

26. Services offered by SSCC are listed below. *Please indicate by a check (√)*
(1) whether or not you are familiar with each service,
(2) whether or not you have used it, and
(3) the amount of help you have received from the services that you have used

Know About		Have Used					
Yes	No	Yes	No		MUCH	SOME	NONE
_____	_____	_____	_____	1. Counseling Services	_____	_____	_____
_____	_____	_____	_____	2. Career Information	_____	_____	_____
_____	_____	_____	_____	3. Transfer Information	_____	_____	_____
_____	_____	_____	_____	4. Financial Assistance	_____	_____	_____
_____	_____	_____	_____	5. Health Services	_____	_____	_____
_____	_____	_____	_____	6. Student Activities	_____	_____	_____
				7. Library Materials (related to class work)	_____	_____	_____
_____	_____	_____	_____	8. Orientation to College	_____	_____	_____
_____	_____	_____	_____	9. Academic Advisement	_____	_____	_____
_____	_____	_____	_____	10. Tutoring Services	_____	_____	_____
_____	_____	_____	_____	11. Job Placement Services	_____	_____	_____
_____	_____	_____	_____	12. Testing Services	_____	_____	_____
_____	_____	_____	_____	13. Minority Affairs Assistance	_____	_____	_____
_____	_____	_____	_____	14. Office of Women's Programs	_____	_____	_____

___27. Is there a program of study not offered at South Seattle Community College in which you would have been more interested than the program in which you are enrolled? *(Select One)*
(1) Yes
(2) No

28. If your answer to question 27 was "Yes," please write the name of the field of study.

_____

___29. Would you like to study on a non-credit basis a topic of special interest with others having similar interests? *(Select One)*
(1) Yes
(2) No

30. If your answer to question 29 was "Yes," what topic would you like? *(Write the name)*

_____

____31. Estimate the amount of time on the average it takes you to travel to the college from where you start most of your trips. *(Select One)*

(1) Less than 15 minutes
(2) 15-29 minutes
(3) 30-44 minutes
(4) 45-60 minutes
(5) over one hour

____32. How do you usually get from where you start the trip to the college location for classes? *(Select One)*

(1) Separate Automobile
(2) Car pool or ride with friends
(3) Metro Bus
(4) Walk
(5) Bicycle
(6) Motorcycle

____33. Are there some types of educational-cultural services or activities you feel should be made available to adults in this part of Seattle? (i.e. forums, special enents, workshops).

(1) Yes
(2) No
(3) Don't know

34. If your answer to question 34 was "Yes," what are they? *(Write In)*

_____

_____

THANK YOU FOR YOUR ASSISTANCE!

Where Students Attended High School
(By percent of respondents)

	Day Students			Evening Students			Total Students		
High School	M	F	T	M	F	T	M	F	T
West Seattle	5.5	11.7	7.5	4.8	8.3	6.8	5.3	10.3	7.3
Chief Sealth	4.8	8.8	6.1	4.8	9.4	7.4	4.8	9.0	6.4
Rainier Beach	1.6	1.8	1.7	2.7	1.6	2.1	1.8	1.7	1.8
Cleveland	2.1	0.7	1.7	1.4	1.6	1.5	2.0	1.1	1.6
Franklin	3.9	1.5	3.1	2.7	5.2	4.1	3.6	3.0	3.4
Garfield	1.2	1.1	1.2	2.1	2.1	2.1	1.4	1.5	1.4
Evergreen	3.2	2.9	3.1	2.1	1.6	1.8	2.9	2.4	2.7
Glacier	1.8	0.4	1.3	-	1.0	0.6	1.4	0.6	1.1
Kennedy	0.7	1.1	0.8	0.7	0.5	0.6	[illegible]	0.9	0.8
Highline	4.1	3.6	3.9	1.4	2.1	1.8	3.5	3.0	3.3
Tyee	1.6	0.4	1.2	2.1	-	0.9	1.7	0.2	1.1
Mt. Rainier	3.5	1.5	2.9	-	1.0	0.6	2.8	1.3	2.2
Vashon Island	-	0.5	0.5	2.7	0.5	1.5	0.6	1.1	0.8
Another in Puget Sound Area	27.2	18.2	24.3	18.5	16.7	17.5	25.3	17.6	22.3
Another in Washington State	9.4	8.8	9.2	7.5	10.4	9.2	8.9	9.4	9.1
Another outside Washington	26.0	34.3	28.7	42.5	33.9	37.6	29.2	34.1	31.1

DO NOT FILM

Parent's Occupations
(By percent of students responding)

	Day			Evening			Totals		
Division	Father	Mother		Father	Mother		Father	Mother	
Professional I	4.6	1.2		2.3	1.2		4.0	1.2	
Professional II	13.8	7.4		12.0	6.5		13.3	7.1	
Managerial, Supervisory, or Executive	13.4	3.8		9.7	4.4		12.4	4.0	
Semi-Professional or Technical	5.8	4.0		3.5	4.4		5.2	4.2	
Owner or a business or farm	8.3	2.6		10.9	4.1		9.1	3.1	
Sales or clerical	2.5	16.4		0.9	8.5		2.0	14.1	
Semi-skilled or skilled worker	21.4	4.3		23.8	4.7		22.1	4.4	
Unskilled worker or general labor	2.6	4.8		5.3	4.1		3.4	4.6	
Homemaker, full-time	0.2	31.2		-	32.8		0.2	31.6	
Retired	10.5	5.1		13.5	7.6		11.3	5.8	
Unemployed	1.3	3.2		2.3	3.5		1.6	3.3	
Other	7.1	6.5		7.0	7.3		7.1	6.8	
No Response	8.3	9.5		8.8	10.9		8.5	9.9	

Student Information About Services at SSCC
(By number of respondents)

	Know About	Have Used	Amount of Help Received		
Service			Much	Some	None
Counseling Services	134	59	8	55	67
Career Information	174	31	4	41	72
Transfer Information	99	22	4	19	91
Financial Assistance	127	58	17	36	70
Health Services	52	4	1	9	98
Student Activities	129	47	12	36	71
Library Materials	141	106	34	71	31
College Orientation	76	27	3	27	85
Academic Advisement	79	19	2	17	92
Tutoring Services	107	12	2	13	98
Job Placement Services	68	11	1	13	97
Testing Services	66	17	1	15	96
Minority Affairs Assistance	65	2	0	5	104
Office of Women's Program	65	4	2	5	88

Student Information About Services at SSCC
(By number of respondents)

	Know About	Have Used	Amount of Help Received		
Service			Much	Some	None
Counseling Services	176	104	19	88	72
Career Information	146	47	17	30	111
Transfer Information	116	21	12	25	132
Financial Assistance	162	55	31	38	104
Health Services	81	8	4	20	120
Student Activities	149	47	11	51	120
Library Materials	158	109	32	90	73
College Orientation	100	37	13	34	118
Academic Advisement	83	34	10	35	122
Tutoring Services	86	12	6	18	153
Job Placement Services	122	21	10	32	114
Testing Services	67	20	5	22	140
Minority Affairs Assistance	85	7	8	8	148
Office of Women's Program	60	10	6	12	145

Student Information About Services at SSCC
(By number of respondents)

	Know About	Have Used	Amount of Help Received		
Service			Much	Some	None
Counseling Services	43	34	9	24	14
Career Information	31	17	4	21	20
Transfer Information	38	13	1	15	20
Financial Assistance	43	21	9	12	20
Health Services	20	5	1	6	28
Student Activities	40	22	6	13	21
Library Materials	40	33	18	15	10
College Orientation	18	8	3	12	19
Academic Advisement	27	13	4	11	14
Tutoring Services	37	13	5	12	16
Job Placement Services	28	6	4	6	20
Testing Services	22	6	3	7	21
Minority Affairs Assistance	25	4	0	5	28
Office of Women's Program	26	6	1	7	26

Student Information About Services at SSCC
(By number of respondents)

	Know About	Have Used	Amount of Help Received		
Service			Much	Some	None
Counseling Services	30	10	2	11	12
Career Information	23	10	5	9	7
Transfer Information	20	8	1	8	11
Financial Assistance	31	11	7	6	9
Health Services	12	2	1	1	15
Student Activities	23	6	2	5	10
Library Materials	30	22	12	13	2
College Orientation	10	1	0	5	13
Academic Advisement	16	3	0	3	14
Tutoring Services	18	3	1	3	14
Job Placement Services	28	9	2	6	12
Testing Services	13	1	0	2	14
Minority Affairs Assistance	12	1	0	2	14
Office of Women's Program	17	1	0	2	14

Student Information About Services at SSCC
(By number of respondents)

	Know About	Have Used	Amount of Help Received		
Service			Much	Some	None
Counseling Services	20	11	4	6	10
Career Information	17	8	3	4	12
Transfer Information	17	7	1	4	13
Financial Assistance	22	13	6	4	12
Health Services	11	2	2	0	14
Student Activities	20	5	2	3	12
Library Materials	20	13	9	3	7
College Orientation	9	3	2	1	13
Academic Advisement	7	4	1	1	14
Tutoring Services	10	4	1	1	12
Job Placement Services	11	3	1	0	14
Testing Services	10	2	1	0	15
Minority Affairs Assistance	11	2	2	0	14
Office of Women's Program	10	5	1	2	15

Student Information About Services at SSCC
(By number of respondents)

	Know About	Have Used	Amount of Help Received		
Service			Much	Some	None
Counseling Services	95	71	22	47	33
Career Information	79	34	15	34	41
Transfer Information	73	20	8	18	60
Financial Assistance	84	33	24	23	54
Health Services	38	2	1	4	75
Student Activities	72	23	3	29	54
Library Materials	88	45	18	34	44
College Orientation	48	23	7	19	57
Academic Advisement	58	23	12	18	53
Tutoring Services	56	6	2	6	72
Job Placement Services	63	5	6	9	63
Testing Services	51	5	4	7	65
Minority Affairs Assistance	55	3	4	5	71
Office of Women's Program	67	10	3	15	64

Student Information About Services at SSCC
(By number of respondents)

	Know About	Have Used	Amount of Help Received		
Service			Much	Some	None
Counseling Services	162	125	43	80	31
Career Information	129	56	19	40	81
Transfer Information	145	102	40	66	42
Financial Assistance	130	48	28	20	92
Health Services	46	3	0	11	116
Student Activities	121	39	11	36	85
Library Materials	146	113	53	66	33
College Orientation	73	20	1	24	100
Academic Advisement	95	53	15	40	80
Tutoring Services	115	119	7	18	100
Job Placement Services	83	11	3	15	106
Testing Services	69	9	3	11	112
Minority Affairs Assistance	85	7	0	15	107
Office of Women's Program	86	19	10	15	104

Student Information About Services at SSCC
(By number of respondents)

	Know About	Have Used	Amount of Help Received		
Service			Much	Some	None
Counseling Services	91	36	10	29	42
Career Information	77	22	7	19	49
Transfer Information	75	16	7	12	51
Financial Assistance	56	5	5	4	57
Health Services	32	1	3	3	59
Student Activities	53	7	4	5	57
Library Materials	73	21	9	16	48
College Orientation	45	7	5	8	53
Academic Advisement	57	18	6	12	50
Tutoring Services	49	2	3	3	59
Job Placement Services	43	2	3	4	58
Testing Services	42	5	5	3	57
Minority Affairs Assistance	49	2	3	3	59
Office of Women's Program	50	5	5	3	60

HIGH SCHOOL SENIORS SURVEY

A study for planning the future development of post-high school training and educational programs is being conducted. You are invited to participate.

Please provide the information requested by writing the number of your answer in the space in front of each question or by following other directions given for specific questions.

Your answers will be treated as confidential. They will not be seen by your teachers nor affect your grades. Thank you for your cooperation.

____ 1. Sex:
(1) Male (2) Female

____ 2. Which high school program best describes the one in which you are enrolled? *(Select one)*
(1) General (i.e. music, art)
(2) College Preparatory
(3) Industrial Arts
(4) Trades
(5) Business and Office
(6) Distributive Education
(7) Health Occupations
(8) Homemaking
(9) Agriculture
(10) Other: *(Write in)* _____

____ 3. Age: *(Select one)*
(1) Under 17; (2) 17; (3) 18; (4) 19; (5) over 19

____ 4. In which third of your high school class do you estimate your grade average up to the beginning of the semester is? *(Select one)*
(1) Upper third (2) Middle third (3) Lower third

____ 5. With whom do you live while attending school? *(Select one)*
(1) Mother and father
(2) Mother (with or without stepfather)
(3) Father (with or without stepmother)
(4) Foster parents
(5) Other: *(Write in)* _____

____ 6. How long have you lived in the area served by your present high school? *(Select one)*
(1) Less than a year
(2) 1-2 years
(3) 3-5 years
(4) 6-10 years
(5) Over 10 years
(6) Don't live in the area

____ 7. Do you plan to continue your education after graduation? *(Select one)*
(1) No
(2) Probably not
(3) Probably yes
(4) Yes
(5) Don't know

___ 8. *(Answer only if your response to item 7 was "Probably yes" or "yes")* Where do you plan to attend school?

(1) Washington State University
(2) University of Washington
(3) Central Washington University
(4) Eastern Washington University
(5) Western Washington University
(6) Evergreen State College
(7) Seattle University
(8) Seattle Pacific University
(9) South Seattle Community College
(10) North Seattle Community College
(11) Seattle Central Community College
(12) Highline Community College
(13) Green River Community College
(14) Other Community College in Washington
(15) Other College/University in Washington
(16) College/University outside Washington
(17) Vocational Technical School
(18) Other: *(Write in)* _____

___ 9. What will you probably do during the first year after your high school graduation? *(Select one)*

(1) Work on a full-time job for someone else.
(2) Attend a school, college or university.
(3) Enter military service.
(4) Travel.
(5) Enter an apprenticeship to learn a trade.
(6) Run my own business.
(7) Work at home for parents.
(8) Become a homemaker full-time.
(9) I don't know.
(10) Other or combinations of above. *(Write in)* _____

10. In which three fields listed below do you have the *most* interest for further study after high school graduation? *(Place the number of your first choice in space A, your second choice in space B, and your third choice in space C.) (If you have no 2nd or 3rd choice, place a zero in spaces B and/or C.)*

___A
___B
___C

(1) Accounting
(2) Agri-Business
(3) Bookkeeping
(4) Business Administration
(5) Clerical Worker
(6) Computer Operator/Programmer
(7) General Business Worker
(8) Key Punch Operator
(9) Secretarial
(10) Receptionist (Business Office)
(11) Receptionist (Dental/Medical)
(12) Salesman/Selling
(13) Food Service Mgmt.
(14) Hotel/Motel Mgmt.
(15) Lawn-Landscape Worker
(16) Forestry
(17) Floristry
(18) Commercial Art and Art
(19) Cook or Baker
(20) Hotel or Restaurant Worker
(21) Beauty Operator
(22) Child Care Aide
(23) Law Enforcement Officer
(24) Nurses Aide
(25) Recreational Director
(26) Social Worker Aide
(27) Waiter or Waitress
(28) Fire Science
(29) Airline Stewardess/Worker
(30) Dramatic Arts
(31) Teaching: (Elem., Secondary)
(32) Dental Assisting/Hygienist
(33) Dental Laboratory Technology
(34) Medical Laboratory Technology
(35) X-Ray Technology
(36) Nursing (RN/LPN)
(37) Engineering Technology
(38) Printing Technology
(39) Pre-Dentistry
(40) Pre-Medicine
(41) Pre-Law
(42) Pre-Engineering
(43) Appliance Repair
(44) Air Conditioning/Refrigeration Tech.
(45) Mechanics, Automotive
(46) Mechanics, Tractor/Farm Equipment
(47) Mechanics, Aircraft
(48) Mechanics, Heavy Equipment, Diesel
(49) Machinist
(50) Welding
(51) Drafting
(52) Electrician
(53) Carpentry
(54) Painter
(55) Plumber
(56) Homemaking
(57) Liberal Arts & Sciences
(58) Other: *(Write in)* _____

___ 11. Are you interested in another field not listed above that can be studied immediately after high school?
(1) Yes (2) No

___ 12. If your answer to question 11 was "yes", please write the name of the field of study.

_____

___ 13. Is the field of study of most interest to you offered at a convenient location from your home? *(Select one)*
(1) I'm not interested in any further study.
(2) Yes, it is.
(3) No, it isn't.
(4) I don't know.

___ 14. In terms of what you plan to do after graduation, how well do you think your high school is preparing you? *(Select one)*
(1) Not very well.
(2) Fair, but could be better.
(3) Very good in most ways, but could be better in other ways.
(4) It is giving me just what I need.

15. If you think that your high school could give you a better preparation, what could it do? *(Write in)*

_____

_____

_____

___ 16. How much help have you received in school *to help you decide* what occupation you want to enter, or in making your educational plans for after high school? *(Select one)*
(1) A lot of help; all I need.
(2) Considerable help, but I could have used more.
(3) Some help, but not very much.
(4) Little or no help.

17. Of what value has each of the following high school services or facilities been to you. *(Opposite each item place a check mark (√) in the column that best describes the way it has helped you.)*

	(1) Good	(2) Fair	(3) Poor
(1) Someone I can confide in about *school* problems.	_____	_____	_____
(2) Library materials on careers	_____	_____	_____
(3) Offering many courses from which to choose.	_____	_____	_____
(4) Information on going to college	_____	_____	_____
(5) Social activities	_____	_____	_____
(6) Someone I can confide in about *personal* problems . . .	_____	_____	_____

___ 18. How do you think your parents or (guardians) feel about your continuing your education after high school graduation? *(Select one)*
(1) Insist or expect me to continue.
(2) Would like for me to continue if I want to.
(3) They don't care one way or the other.
(4) Don't want me to continue.
(5) Won't allow me to continue.

19. What kind of a job would you like to have ten years from now? *(Name one job that is your first preference.)*

_____

___20. If employed while attending high school, how many hours on the average do you work each week? *(Select one)*
(1) Not employed (3) 20-29 hours
(2) Less than 20 hours (4) 30 hours or more

___21. Indicate the one phrase that you think best describes your family's income status? *(Select one)*
(1) Frequently have difficulty making ends meet.
(2) Sometimes have difficulty in getting the necessities.
(3) Have necessities but not many luxuries.
(4) Comfortable but not well-to-do.
(5) Well-to-do.
(6) Wealthy

22. How important do you think each of the following reasons is as to why some of your high school classmates and friends might not enroll at a Community College. (In the space *in front of each reason* place the number 1, 2, or 3 to indicate the level of importance.)

1. NO IMPORTANCE 2. SOME IMPORTANCE 3. MUCH IMPORTANCE

___(1) Costs are too high.
___(2) Want a better college.
___(3) Want to live away from home.
___(4) Types of students that go there.
___(5) Inadequate information about Community Colleges.
___(6) Advice of high school counselors
___(7) Advice of high school teachers.
___(8) Program wanted not offered at a community college.
___(9) Lack of transportation.
___(10) Lack of college atmosphere.
___(11) Lack of financial assistance.
___(12) Other: (Write in) _____

ANSWER THE FOLLOWING QUESTIONS *ONLY* IF YOUR FUTURE PLANS "DO NOT" OR "PROBABLY DO NOT" INCLUDE CONTINUING YOUR EDUCATION.

___23. If you *do not* plan to continue in school, which of the following types of training or education would have the greatest interest to you? *(Select one)*
(1) Work as an apprentice to learn a trade.
(2) Take post-graduate high school work in the high school at night.
(3) Enter military service for training.
(4) On-the-job training with a company or industrial firm.
(5) Correspondence study.
(6) Am not interested in additional education or training.

24. If you "do not" or "probably do not" plan to continue in school, *check all* the reasons that might apply to you.
___(1) Tired of school.
___(2) Want to work and make money.
___(3) Too expensive, can't afford it.
___(4) Want to get married.
___(5) Parents don't want me to.
___(6) People who don't continue in school can get ahead just the same.
___(7) Waste of time.
___(8) Can't make good enough grades.
___(9) Poor health.
___(10) Other: *(Write in)* _____

___25. If you will "not" or will "probably not" continue your education after high school graduation, would you change your plans if you had more money? *(Select one)*
(1) Yes (2) No (3) Maybe

___26. If your answer to item 25 was "Yes" or "Maybe," how much money would you need through scholarship, loan or other provisions?
(1) Enough to pay all expenses.
(2) Enough to pay about one-half the expenses.
(3) Enough to pay less than half the expenses.

FIELDS OF INTEREST FOR FURTHER STUDY
(Number of seniors in order of interest)**

Field of Interest	1st	2nd	3rd	Field of Interest	1st	2nd	3rd
1. Accounting	48	37	41	30. Dramatic Arts	23	31	26
2. Agri-Business	5	7	9	31. Teaching (Elem./Sec.)	37	32	34
3. Bookkeeping	4	24	7	32. Dental Asst./Hygienist	14	12	6
4. Business Admin.	157	96	48	33. Dental Lab. Technology	4	3	7
5. Clerical Worker	24	21	18	34. Medical Lab. Technology	8	17	11
6. Computer Operator/Prog.	59	42	52	35. X-Ray Technology	3	6	16
7. General Business Worker	12	20	28	36. Nursing (RN/LPN)	22	9	12
8. Key Punch Operator	7	12	8	37. Engineering Technology	45	45	26
9. Secretarial	29	32	17	38. Printing Technology	6	6	4
10. Receptionist (Business)	11	31	26	39. Pre-Dentistry	11	13	6
11. Receptionist (Dent/Med)	5	9	12	40. Pre-Medicine	35	25	21
12. Salesman/Selling	20	34	30	41. Pre-Law	41	28	35
13. Food Services Mgmt.	10	12	20	42. Pre-Engineering	42	44	25
14. Hotel/Motel Mgmt.	11	16	24	43. Appliance Repair	3	4	2
15. Lawn-Landscape Worker	10	14	11	44. Air Cond./Refrigeration	1	2	2
16. Forestry	28	34	51	45. Mechanics, Automotive	52	37	38
17. Floristry	6	5	13	46. Mechanics, Farm	1	3	3
18. Commercial Art & Art	36	49	29	47. Mechanics, Aircraft	15	17	20
19. Cook or Baker	5	13	15	48. Mechanics, Heavy Equip.	10	15	15
20. Hotel/Restaurant Worker	0	4	9	49. Machinist	14	12	16
21. Beauty Operator	23	17	13	50. Welding	20	27	27
22. Child Care Aide	12	21	13	51. Drafting	26	32	24
23. Law Enforcement	16	26	27	52. Electrician	25	20	29
24. Nurses Aide	6	9	4	53. Carpentry	42	45	27
25. Recreational Director	16	27	27	54. Painter	4	12	17
26. Social Worker Aide	11	26	26	55. Plumber	10	12	10
27. Waiter or Waitress	3	3	7	56. Homemaking	5	12	37
28. Fire Science	4	6	1	57. Liberal Arts & Sciences	32	24	27
29. Airline Stew./Worker	75	67	65	58. Other	258	101	61
				Did Not Respond	45	147	267

**There were 1507 responses for each choice.

(Graduation Code) CONFIDENTIAL

HIGH SCHOOL GRADUATES SURVEY

Please complete all items in this form, using either a pen or pencil. Write the number of your answer in the space in front of the question or follow other directions that are given. It will take you about 15 minutes.

When you have completed this form, put it in the enclosed envelope and mail it. The envelope is addressed and stamped for your convenience.

Thank you for your cooperation. The responses that you submit are important toward the development of post-high school training and educational opportunities.

---

1. Where are you living at the present time? *(Select one)*
   ____(1) Within the City of Seattle.
   ____(2) Within Seattle area, outside the city.
   ____(3) Outside Seattle area, within State of Washington.
   ____(4) Elsewhere.

2. What type of further training or education have you received (or are now receiving) since graduating from high school? *(Check (✓) all that apply)*
   ____(1) No additional training or schooling.
   ____(2) On-the-job training at a place where I was employed.
   ____(3) Business College.
   ____(4) Vocational Technical School.
   ____(5) Community College.
   ____(6) College or University.
   ____(7) Adult education course at a local high school.
   ____(8) Correspondence course.
   ____(9) Military service school.
   ____(10) Other: *(Write in)* _____

____ 3. What are you doing at the present time? *(Select one)*
   (1) Working, full-time
   (2) Working, part-time
   (3) Attending school, full-time
   (4) Attending school, part-time
   (5) Other or combinations of above: *(Write in)* _____

____ 4. Which high school course or curriculum best describes the one that you took in high school? *(Select one)*
   (1) General (i.e. music, art)
   (2) College Preparatory
   (3) Industrial Arts
   (4) Trades
   (5) Business and Office
   (6) Distributive Education
   (7) Health Occupations
   (8) Homemaking
   (9) Agriculture
   (10) Other: *(Write in)* _____

5. If you have received further training or education (item 2) indicate the type. *(Place a (√) mark in front of all that apply).*

_____(1) day school
_____(2) evening school
_____(3) weekend classes

____ 6. If you are going to school at the present time, indicate the type.

(1) Attend during the day
(2) Attend evening classes
(3) Attend weekend classes
(4) Other: *(Write in)* _____

7. What school(s) have you attended (or are presently attending) since high school graduation? *(Place the numbers of the schools in the spaces provided.)*

____(a)
____(b)

(1) Washington State University
(2) University of Washington
(3) Central Washington University
(4) Eastern Washington University
(5) Western Washington University
(6) Evergreen State College
(7) Seattle University
(8) Seattle Pacific University
(9) South Seattle Community College
(10) North Seattle Community College
(11) Seattle Central Community College
(12) Highline Community College
(13) Green River Community College
(14) Other Community College in Wash.
(15) Other College/University in Wash.
(16) College/University outside Wash.
(17) Vocational Technical School
(18) Other: *(Write in)* _____

____ 8. In your opinion how well did high school prepare you for college or other post high school work? *(Select one)*

(1) Did not attend a school or college.
(2) My preparation was inadequate.
(3) Fair, but could have been better.
(4) Very good in some ways, but could have been better in other ways.
(5) My preparation was excellent.

____ 9. In your opinion how well did high school prepare you for employment? *(Select one)*

(1) Have not entered employment.
(2) My preparation was inadequate.
(3) Fair, but could have been better.
(4) Very good in some ways, but could have been better in other ways.
(5) My preparation was excellent.

____10. How do you think your parents or guardians felt about your taking additional schooling after high school graduation? *(Select one)*

(1) Insisted I go.
(2) Wanted me to go if I wanted to.
(3) Didn't care one way or the other.
(4) Did not want me to go.
(5) Don't know.

____11. Are you interested now in the opportunity for further education or training? *(Select one)*

(1) Yes
(2) No

12. If your answer to item 11 was "Yes" what type of education or training are you interested in? *(Write in)*

_____

____13. For what major purpose would you be interested in further education or training at this time? *(Select one)*

(1) Not interested
(2) Improve in present job
(3) Self Improvement
(4) Prepare for a new job
(5) Finish program I started
(6) Other: _____

____14. What type of work do you plan to be doing ten years from now? *(Select one)*
(1) *Unskilled:* Requires no specific training.
(2) *Semi-skilled:* Requires some specific training.
(3) *Skilled:* Requires trade or technical school plus a period of apprenticeship.
(4) *Semi-professional, technical, or a middle business occupation:* Usually requires two years of college or technical education training.
(5) *Professional:* Usually requires graduation from a four year college and possibly an advanced degree.
(6) None of these.
(7) Don't know.

____15. Have you decided what kind of job you would like to have ten years from now? (i.e. carpenter, teacher) *(Select one)*
(1) Yes
(2) No

16. If your answer to item 15 was "yes", what kind of job is it?
(Write in) _____

17. If you are working full-time or part-time now, what kind of job is it?
(Write in) _____

____18. How much help did you get from your high school in deciding what kind of a job you want ten years from now? *(Select one)*
(1) Have not decided on job
(2) Lots of help
(3) Considerable help
(4) Some help
(5) Little or no help

19. If you are not going to school at the present time, indicate by a check (√) the reasons why you are not:
____ (1) Working full-time.
____ (2) Program not available near where I live.
____ (3) Financial reasons.
____ (4) Family responsibilities.
____ (5) Not interested.
____ (6) Already have completed the school I attended after high school.
____ (7) Too difficult to make grades.
____ (8) Didn't take college preparatory subjects.
____ (9) Now in military service.
____(10) Do not know what programs are being offered.
____(11) Other: _____

____20. If you *did not* attend school after high school graduation or *are not* now, would you have if more financial assistance had been available? *(Select one)*
(1) Yes
(2) No
(3) Does not apply

____ 21. Indicate what you think about the availability of opportunities for training and education beyond high school for people in the area where you graduated. *(Select one)*
(1) Adequate for all who desire more school.
(2) Fair amount of opportunity, but not all youth who desire more education or training find what they want available.
(3) Poor opportunities, there should be more available locally.

____ 22. Are there some types of educational-cultural services or activities that you feel should be available to adults in the area where you graduated? (i.e. concerts, special events, workshops)
(1) Yes
(2) No
(3) Don't know

23. If your answer to item 22 was "yes", what are these services or activities?
(Write in)

_____

_____

24. In which of the following types of assistance would you have interest? *(Check (√) all that apply)*

____(1) Refresher mathematics
____(2) Reading improvement
____(3) Job or career counseling
____(4) Improve Technical Job skills
____(5) Improve Secretarial skills
____(6) Improve Communication skills
____(7) Improve Human Relations skills
____(8) None of these

____ 25. Would you be interested in studying, on a short-term basis, a topic of special interest with others having similar interests? *(Select one)*
(1) Yes
(2) No

26. If your answer to item 25 was "yes", in which of the following topics would you be interested? *(Check (√) all that apply)*

____ (1) Painting
____ (2) Ceramics
____ (3) Photography
____ (4) Art Appreciation
____ (5) Group Singing
____ (6) Contemporary Drama
____ (7) Dance/Exercise
____ (8) Creative Writing
____ (9) Furniture Making
____(10) Home Repair
____(11) Automotive Maintenance
____(12) Women's Programs
____(13) Self Defense
____(14) Interior Design
____(15) Landscape Design
____(16) Fabric & Apparel Design
____(17) Lecture Series
____(18) Consumer Interest Topics (taxes, home buying, investments)
____(19) Principles of Supervision
____(20) Principles of Management
____(21) Technical Report Writing
____(22) Gourmet Cooking
____(23) Other: (Please list)

_____
_____
_____
_____
_____

THANK YOU FOR YOUR ASSISTANCE